



2022



PROJECTS FINANCED BY  
**THE GREEN AND  
SUSTAINABILITY BOND**





**Valérie Péresse,**  
President of the Île-de-France Region

The urgency to integrate the issue of sustainability into all regional policies becomes clearer every year. The Ile-de-France Region is more aware than ever of the seriousness of climate change and is concerned about the well-being of its inhabitants. For this reason, it has made environmental and social concerns the common thread running through its actions.

Through its funding, the Region demonstrates how primordial sustainable finance has been for our institution for more than ten years. In fact, in 2012, the Ile-de-France Region was the first local authority in Europe to issue a green and responsible bond. Since then, it has not stopped improving its practices, so much that its executive body took the resolution to use only green and responsible financing in 2019. The outstanding amount of green and responsible regional debt has thus been rising steadily since 2012. It now reaches the 85% mark.

This 2022 Responsible Finance Allocation and Impact Report illustrates our commitments. It is drawn up under the Region's Green and Responsible Emissions Framework, a document that governs the selection of funded projects and enables the Region to fulfil its commitment towards transparency. Through this framework, the most rigorous standards of the market are considered, like the European taxonomy.

This year again, the care taken in the screening process allows us to feature projects which tackle environmental, social, and economic issues. The EOLE project is a significant example of this ambition: it consists in the extension of the RER E line to the west, thus improving and decarbonizing the mobility of 1,400,000 Ile-de-France residents. It reflects the regional council's commitment to the daily life of Ile-de-France residents, the fight against climate change, while promoting the opening up of the territory.

This new reporting represents the opportunity for us to enhance our transparency, hence the detailing of the fulfilment of the standards set out by the regional eligibility criteria for each project.

The Region's commitments to green and responsible finance were once again rewarded in 2023. Two new prizes were granted to the Region's agents to highlight the effectiveness and quality of the regional sustainable finance policy:

- ▶ **Award for "Sustainability bond of the year from a local authority", and award for "Innovation in the use of proceeds (sustainability bond)"**, presented by the organization Environmental Finance on April 6th, 2023. These prizes recognize the work carried out with the evolution of the framework for regional bond issues.
- ▶ **Prize for the "Best green bond thought leadership team"**, awarded by Capital Finance International in June 2023.

I would therefore like to express my thanks to all the investors who have worked with us for several years, as well as to those who joined us during this new bond issue. The choice of the Ile-de-France Region is the choice of a local authority which is unequivocally mobilized, responsible, and committed to its inhabitants.

Through your responsible financing, you actively support regional action for an ever greener, social, and sustainable Ile-de-France.

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# The 2022 green and sustainable bond



TERRESTRIAL AND AQUATIC BIODIVERSITY CONSERVATION

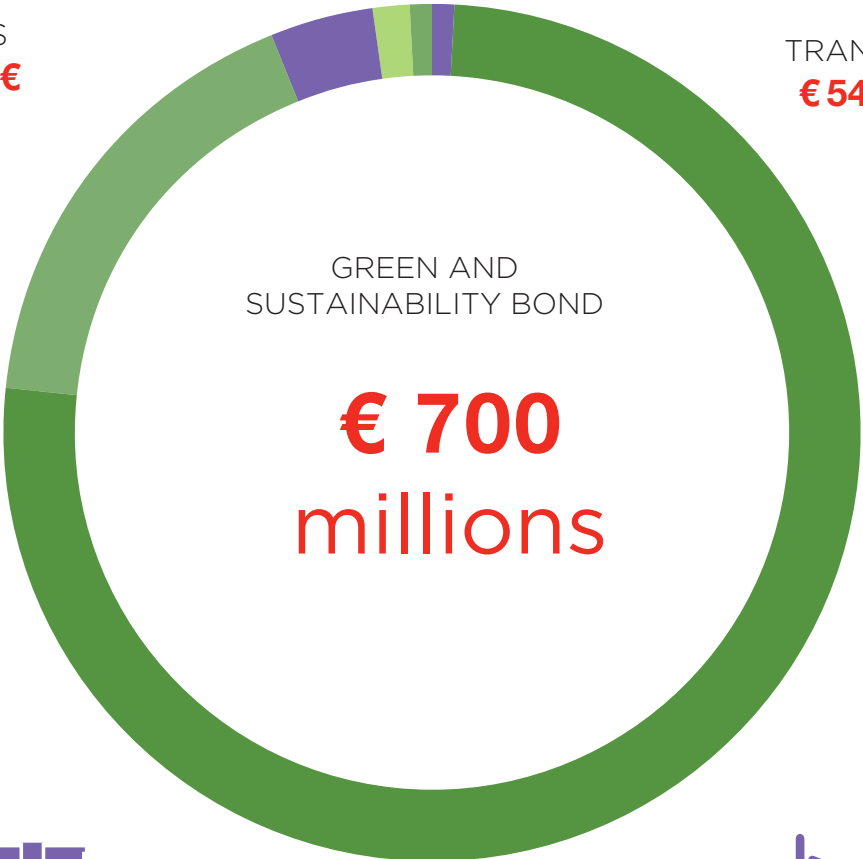
**€ 0,6 millions**  
0,09 %



CLEAN TRANSPORTATION  
**€ 546,7 millions**  
78,10 %



GREEN BUILDINGS  
**€ 123,7 millions €**  
17,67 %



GREEN AND SUSTAINABILITY BOND

**€ 700 millions**



AFFORDABLE HOUSING  
**€ 1,0 million**  
0,15 %



ACCES TO ESSENTIAL SERVICES: EDUCATION  
**€ 28,0 millions**  
4 %



GREEN PROJECTS CATEGORIES  
**€ 670,96 millions**  
95,9 %



SOCIAL PROJECTS CATEGORIES  
**€ 29,04 millions**  
4,1 %

ISIN : FR001400BCS5



# Projects financed by the 2022 green and sustainability bond

✓ Statement of expenditures certified as accurate by the public accountant.

	Allocation rate	% Alignment to the 1st objective of the European Taxonomy	Amount (€M)	
	100 %	78,1 %	700,00	
<b>GREEN PROJECTS CATEGORIES</b>	<b>95,9 %</b>		<b>670,964</b>	
<b>GREEN BUILDINGS</b>	<b>17,7%</b>		<b>123,672</b>	<b>p. 21</b>
<b>New secondary school and boarding school construction projects</b>	<b>5,6 %</b>		<b>39,18</b>	
New high school in Vincennes (94)			20,377	p. 22
Albert Camus high school in Bois-Colombes (92)			18,805	p. 24
<b>Secondary school renovation project</b>	<b>9,6 %</b>		<b>67,159</b>	
Nadar high school in Draveil (91)			8,328	p. 26
Uruguay-France high school in Avon (77)			10,019	p. 28
Pierre Mendès-France high school in Ris-Orangis (91)			8,690	p. 30
Marcel Cachin high school in Saint-Ouen (93)			9,445	p. 32
Gustave Monod high school in Enghien-les-Bains (77)			11,106	p. 34
Fernand and Nadia Léger high school in Argenteuil (95)			10,735	p. 36
Georges Brassens high school in Villeneuve-le-Roi (94)			8,836	p. 38
<b>Higher education construction project</b>	<b>2,3 %</b>		<b>16,401</b>	
Grand Espace Documentaire - Condorcet Campus			0,056	p. 40
Conservatoire National des Arts et Métiers (CNAM) - LANDY 2			11,850	p. 42
Conservatoire National des Arts et Métiers (CNAM) - SYNERGIE 2			4,409	p. 44
"Mathstic" building			0,086	p. 46
<b>Higher education renovation project</b>	<b>0,1 %</b>		<b>0,930</b>	
Technical University Institute (IUT) in Neuville			0,930	p. 48
<b>CLEAN TRANSPORTATION</b>	<b>78,1 %</b>	<b>78,1 %</b>	<b>546,668</b>	<b>p. 51</b>
<b>Projects: subways</b>	<b>14,4 %</b>	<b>14,4 %</b>	<b>100,773</b>	
Subway line 4			16,591	p. 52
Subway line 11			81,531	p. 54
Subway line 14			2,651	p. 56
<b>Projects: tramways</b>	<b>24,2%</b>	<b>24,2 %</b>	<b>169,169</b>	
Tramway line 9			9,373	p. 58
Tramway line 10			49,593	p. 60
Tramway line 12			73,462	p. 62
Tramway line 13			36,741	p. 64
<b>Projects: railway links</b>	<b>39 %</b>	<b>39 %</b>	<b>272,975</b>	
EOLE			272,975	p. 66
<b>Projects: Development for buses on own sites and layout of roadways</b>	<b>0,5 %</b>	<b>0,5 %</b>	<b>3,751</b>	
T ZEN			3,751	p. 68
<b>TERRESTRIAL AND AQUATIC BIODIVERSITY CONSERVATION</b>	<b>0,1%</b>		<b>0,624</b>	<b>p. 71</b>
<b>Green spaces agency programs</b>	<b>0,1 %</b>		<b>0,624</b>	
Restoration of the Parc de Becon in Courbevoie			0,242	p. 72
Creation of a public garden in Saint-Germain-en-Laye			0,182	p. 74
Extension of the green corridor and creation of public gardens in Sartrouville			0,200	p. 76
<b>SOCIAL PROJECTS CATEGORIES</b>	<b>4,1 %</b>		<b>29,036</b>	
<b>ACCESS TO ESSENTIAL SERVICES: EDUCATION</b>	<b>4,0 %</b>		<b>28,006</b>	<b>p. 79</b>
Louise Michel and Langevin-Wallon high schools in Champigny-sur-Marne (94)			28,006	p. 80
<b>AFFORDABLE HOUSING</b>	<b>0,1 %</b>		<b>1,030</b>	<b>p. 83</b>
Social housing - young workers' residence			1,030	p. 84

## PRESENTATION OF THE ILE-DE-FRANCE REGION

As a leading regional authority, the Ile-de-France Region manages a budget of over €5.5 billion, the highest among the French regions, half of which is dedicated to long-term investment encouraging the vitality and attractiveness of the region.

The Region therefore plays a pivotal role in sustainable development. It is the competent authority for defining strategic guidelines for local public action in the region: regional development, transport (with Ile-de-France Mobilités), economic development, research and innovation, climate and energy, biodiversity and waste management. Over the 2020-2024 period, the Region is devoting nearly €10 billion to environmentally friendly spending. Spearheading the foundation of a sustainable regional ecosystem, investment expenses have increased slightly since 2020.

### Ambitious environmental road map

As part of its actions, the Region has established a cross-cutting environmental roadmap that is resolutely geared towards the territories and permeates all regional policies:

- Presentation of a new **Environmental Master Plan for the Ile-de-France Region** by 2040 [Schéma directeur environnemental de la Région Île-de-France (SDRIF-E)] in 2023. This plan directly influences land use planning, housing and the environment and it is largely based on sobriety and sustainability aims. It initiates a trajectory of land sobriety, creation and protection of natural spaces and limitation of the artificialization of soils.
- **Regional Plan for Adaptation to Climate Change (PRACC)**, launched in 2022. This plan is estimated at 1 billion euros, and it is made up of a three-pronged strategy: "Protecting Ile-de-France residents, especially the most vulnerable ones"; "Protecting ecosystems"; "Protecting the economic fabric of the Ile-de-France region". It aims at responding to all the issues raised by climate change.
- Establishment of the **Ile-de-France GREC**, the Regional Group for Studies on Climate Change and its Environmental Impacts. The role of this working group is to scientifically explain the changes set off by the climate deregulation, to anticipate future climate changes and to help the Region to adapt upon these predictions.
- Transportation: environmental objective to **reduce greenhouse gas emissions** linked to transport and mobility.
- New **regional economic development strategy** "Impact 2028" for 2022-2028, which recognizes the significance of environmental issues as part of its objective of supporting the Ile-de-France economy with regard to businesses, employment, and innovation.
- Repositioning support for the **themed research networks** (major interest areas), mainly by targeting the major challenges in terms of climate, energy, and resources. The AI Challenge for Energy Transition reflects this dynamic, as it encourages the development of decision-making tools relating to the energy transition.
- **High environmental requirement**, with the adoption of various plans, strategies, schemes and mechanisms over the last four years, such as the Regional Plan for Adaptation to Climate Change (PRACC), the "Un nouvel air pour l'Île-de-France" (A new Air for the Ile-de-France Region) plan, the regional Waste Prevention and Management plan, the "Energy-Climate" plan, which emphasises innovation and the development of renewable energies, the "Solar", "Hydrogen" and "Methanisation" plans, the "Green", "Anti-jam" and "Bicycle" plans and also the preparation, in consultation with local players, of the Regional Strategy for Biodiversity 2020-2030.
- **Support for organic farming** in Ile-de-France and short supply chains with the adoption of the "Regional Strategy for Forests and Woods" in 2017, the "Regional Strategy for growth in bio-based materials and products" in 2018 and the "Regional plan for local, sustainable and solidarity-based alimentation" in 2021.

In addition, regardless of the area of intervention, the Region makes sure that all its guidelines are coherent and that sustainable development and social responsibility are central to its action. Thus, the Region aims to be an exemplary authority in terms of the institution's operation.

### Several exemplary actions by the Region

The Region affirms its commitment to the future of Ile-de-France residents by making autism a major regional cause for the year 2022. The Region also pays particular attention to the early diagnosis and treatment of autism.

In October 2017, to encourage union commitment by recognising the skills of union representatives, the Region, with five out of seven union organisations (representing 72% of the Region's staff), signed a Charter of recognition of the union path in career development and professional evolution. Furthermore, as part of its active policy for gender equality and combating violence towards women (designated the Important Regional Cause in 2017), the Region signed a framework agreement with five unions on professional gender equality.

In March 2019, the Region also adopted a framework agreement to improve public service efficiency through the quality of life at work, autonomy and responsibility. By continuing to modernise, the Region has committed through several schemes to encourage freedom in the organisation of work (working from home, flexible working hours), whilst remaining anxious to protect its staff and by becoming a pioneering administration in recognising the right to disconnect.

Beyond that, to make public procurement contracts more sustainable and accessible, the Region wanted to overhaul its purchasing policy as early as 2016, having taken part in creating the Maximilien platform assembling all Ile-de-France public procurement contracts. In 2018, the Region had already signed a "Supplier relations and sustainable purchases" Charter as part of a process of progress with regard to its suppliers, particularly companies in the social and socially-inclusive economy.

### Commitment confirmed by outside assessments

The Region enjoys excellent credit quality equivalent to that of the French State, meaning that it can intervene in the long term in its region in the best possible conditions. It is currently rated Aa2, with stable outlook, by Moody's and AA-, stable outlook, by Fitch.

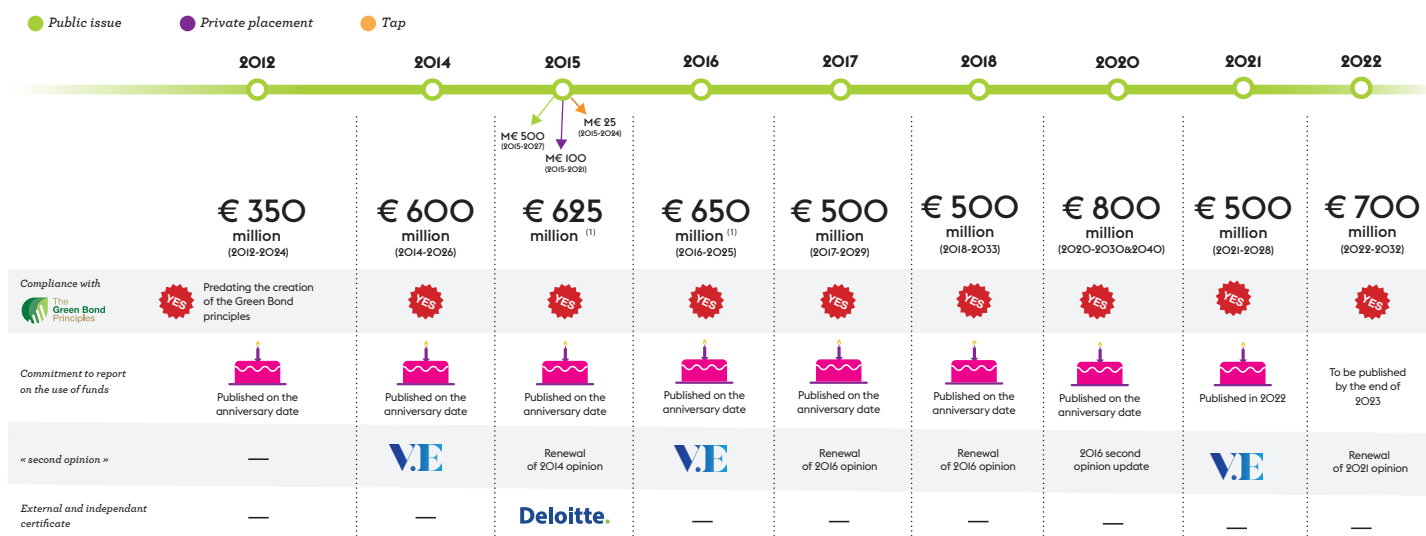
The extra-financial environmental, social and governance (ESG) performance of the Ile-de-France Region is also recognised. In 2021, the Vigeo Eiris agency, which has been assessing the Region since 2009, scored the Region's performances as 63/100 overall, which are qualified as "advanced". The agency is thus acknowledging the sustainable performance of the Ile-de-France Region by placing it third out of the 29 European local authorities assessed.

## A REGULAR PLAYER IN THE GREEN AND SUSTAINABLE BOND MARKET

The Ile-de-France Region is a frequent and regular issuer in the green bond market. It raised more than 5.2 billion euros with its green and sustainable issues between 2012 and 2022 through nine financing operations including eight benchmark public issues. Green and sustainable financing accounts for 85% of the total outstanding regional debt at the end of 2022.

The green and sustainable operations launched by the Region are consistent with the Sustainability Bond Guidelines and thus governed by both the Green Bond Principles and the Social Bond Principles. They are targeting best practices, for example through recourse to a third party opinion on the 2015 report or by requesting that the second party opinion is updated on the Region's commitments under its 2021 operations. The framework established by the Region on the green and sustainable issues is described on the next page.

# HISTORY OF GREEN AND SUSTAINABLE BORROWING BY THE REGION AND THE COMMITMENTS MADE



<sup>(1)</sup> Aggregated amount

## Recent awards:

The Ile-de-France Region has been awarded several trophies in recent years for its green and sustainable financial strategy, in particular:

- Prize for the "Best green bond thought leadership team", awarded by Capital Finance International in June 2023.**

In June 2023, the Ile-de-France Region, and in particular its Finance Department, saw its work rewarded by Capital Finance International for all of its activities related green and sustainable bond issuance.
- Environmental Finance annual award for "Sustainability bond of the year from a local authority", and award for "Innovation in the use of proceeds" on April 6th, 2023.**

These two prizes highlight the efforts initiated by the Region in favour of the integration of the requirements of the European Taxonomy regulation. They reward the innovative character of the bond issues framework of the Ile-de-France Region, especially regarding its inclusion of biodiversity criteria and its normative exclusions.
- "Business Partner" Award**

The award was presented to the region in April 2022 at the Digital Finance Awards, highlighting the work by the Finance division with the region's operational departments in order to focus regional finances on ever more responsible financing and consider the emerging international regulations on the issue (sustainable development goals, European taxonomy, ICMA, etc.).
- Prize for the "best sustainable bond issuer in France"**

In April 2021, Capital Finance International (CFI) awarded the Île-de-France Region the prize for the "best sustainable bond issuer in France" in connection with the €800 million bond issue in 2020. This prize pays tribute to the Region's pioneering spirit in sustainable development and underlines that "half the budgeted regional expenses have contributed to the Region's ecological ambitions".

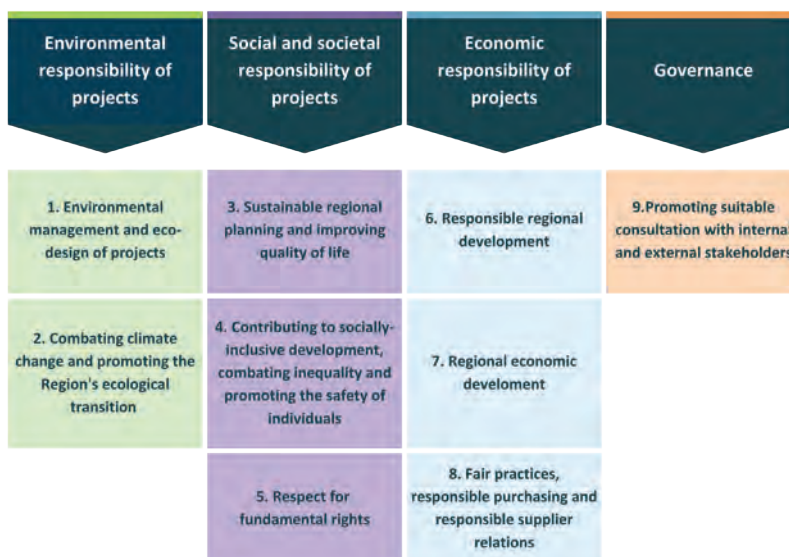
## THE REGION'S GREEN AND SUSTAINABILITY OPERATIONS FRAMEWORK

The green and sustainable operations launched by the Ile-de-France Region comply with the major Green Bond Principles and Social Bond Principles; they aim to implement the best practices in place.

### Allocation of funds to four green project categories and six categories of illustrative regional action projects

<b>GREEN PROJECTS</b> CATEGORIES	<b>Green buildings</b>	Construction and renovation of buildings using a sustainable development approach, promoting respect for the environment
	<b>Clean transportation</b>	Construction of public rail transport infrastructures and low-carbon road transport infrastructures dedicated to public passenger transport
	<b>Renewable energy</b>	Projects that contribute to the development of renewable energy and energy efficiency
	<b>Terrestrial and aquatic biodiversity conservation</b>	Restoration and rehabilitation of ecosystems, sustainable forest management, investment in protected areas
<b>SOCIAL PROJECTS</b> CATEGORIES	<b>Access to essential services: education</b>	Provide access to quality education infrastructures (public secondary education, public higher education)
	<b>Access to essential services: health</b>	Projects that contribute to the development of health infrastructures and the purchase of healthcare equipment, research and development projects in terms of health and projects related to the setting up of any emergency infrastructures required in an exceptional crisis
	<b>Access to essential services: social inclusion</b>	Development of accommodation capacity for vulnerable populations, of medical educational centres, projects to improve the accessibility of buildings and infrastructures
	<b>Affordable housing</b>	Projects designed to develop and renovate the social housing stock, in line with environmental and social requirements and increasing access to housing and improving comfort
	<b>Affordable basic infrastructures (transport, energy, green spaces and sport infrastructures)</b>	Construction of public transport infrastructures for better access to the entire region, projects to improve the comfort and safety of infrastructures for transport users and residents, development of basic infrastructure in terms of local renewable energy and energy efficiency; in terms of green spaces, preservation of the natural environments and biodiversity, development of sporting facilities
	<b>Support for employment creation, prevention &amp; fight against unemployment related to crises (including through SMEs &amp; MICs financing measures)</b>	Projects that contribute to creating or maintaining local jobs, through supporting regional SME & MIC, and projects in the social and socially inclusive economy, support for research and innovation by SME & MIC and the development of the region's attractiveness

## Nine eligibility criteria on the purpose and management of projects



In some cases, especially for projects for emergency measures in a crisis, not all the eligibility criteria may be fully covered.

### Publication of a report on the use of funds (by the end of year n+1)

Reports published by the Region illustrate compliance with commitments made at the time of issue relating to the allocation of funds, compliance with the eligibility criteria for each project/scheme financed and the presentation of cross-cutting impact indicators for the projects. Schemes involving a multitude of small projects are reported on one or two project examples which are presented for each scheme funded.

### Transparency on management of funds and the allocation and selection process

#### 1/ Management of funds:

In terms of financial flows, the funds from the borrowing are fungible in the regional treasury. French authorities are obliged to deposit their cash balance in a single account at the French Treasury.

From a budgetary and accounting viewpoint, borrowings are entered as investment earnings and cover the investment expenses for the year. This principle of budgetary annuality guarantees investors that the funds raised by the green and sustainable loans will be used in the year the loan is raised to finance the Region's investment projects. The Regional Department of Public Finances (DRFiP) controls the regularity of the expenditure mandated by the Region and makes the payment. In his capacity as the designated public accountant for the Île-de-France Region, the Regional Director of Public Finances for the Ile-de-France Region and Paris certifies that the expenses listed on the statement produced have been paid.

#### 2/Project allocation and selection process:

This process starts after the end of the year in which the loan in question was raised, when the Region has a perfect view of the level of investment expenditure for each project.

The finance division, which coordinates the preparation of the report, requires each operational division in the Region to select a certain number of investment projects:

- Firstly, the operational divisions must identify projects corresponding to an amount of expenses recorded in the year and which meet the eligibility criteria for green and sustainability loans from the most exemplary in this respect. In some cases, especially for projects for emergency measures in a crisis, some eligibility criteria may not be fully covered. The Region's divisions that sponsor the projects are the best placed to select the most illustrative projects in their portfolio.
- Secondly, the management control and financial decision department verifies the amount of expenses for each project in conjunction with the division in question. The finance division then distributes the funds raised by the loan on the basis of the proposed projects, the sustainable finance committee (SFC) approves the definitive selection.

Once this step has been completed, each division prepares the report on the selected projects. The information obtained by each division is then centralised within the finance division, which consolidates the document and verifies the overall consistency. The document is then sent to the communications division for design and printing.

The Ile-de-France Region has a "reasonable" insurance level (the best) from Vigeo-Eiris on the credibility of the sustainable development framework (SPO 03/2021 : <https://www.iledefrance.fr/sites/default/files/medias/2021/03/bond-framework-region-IDF-EN.pdf>)

## INTRODUCTORY ASPECTS OF THE 2022 REPORT

The report submitted this year on the projects financed by the 2022 green and sustainable bond issue contains a higher level of information than that presented in 2021 (last one published). It includes:

- A table summarising the allocation of funds to the projects/schemes submitted;
- A map displaying the repartition of the projects throughout the Ile-de-France territory;
- A table summarising the three potentially cross-cutting project impact indicators identified: jobs supported by the project (in construction and operating phases), CO2 emissions avoided by the project, number of project beneficiaries, by including a methodological note presenting each methodology used to calculate the impact indicators;
- A sheet on each project/scheme submitted describing the purpose of the project and updating its lifecycle, if necessary; a summary table illustrates with evidence how each project meets each eligibility criterion; every sheet header gives the essential project information and recalls, if necessary, the amounts allocated to the project from previous green and sustainable borrowing by the Region since 2014;
- An evaluation, where possible, of the project's alignment with the first objective (Mitigating climate change) of the European green taxonomy.

Like last year, a project example is submitted for each scheme financed, for schemes involving a multitude of small projects.

- A review of projects financed by the 2022 green and sustainable borrowing from the perspective of the United Nations Sustainable Development Goals:
- The targets of the Sustainable Development Goals to which each project responds are identified as such in the header of each project sheet;
- A summary table is presented to provide an overview of the contribution of each project to each of the goals; the approach used to construct this table is presented in the methodological note. The table also links to the impact indicators referred to in the project sheets;
- This approach shows that, on average, each project makes a direct and positive contribution to 8.1 UN Sustainable Development Goals compared with a subset of eleven Sustainable Development Goals that can potentially be applied directly to investment projects financed by the 2022<sup>1</sup> green and sustainable borrowing.

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<sup>1</sup>See methodological note





2022 report preparation process	
9 March 2023	Sustainable Finance Committee (SFC) launching the projects allocation and selection process
April-May 2023	Verification of the amount of expenses on each project by the management control and financial decision department
May-June 2023	Each division involved prepares the report on the projects identified, illustrating how each project and scheme meets the eligibility criteria and filling in an impact indicator grid, mainly focusing on information on the methodology used
June 2023	Choice by the finance division of a first forecast selection. Consolidation, standardisation, and consistency check by the finance division of all information produced
29 June 2023	Sustainable Finance Committee (SFC) meeting definitively selecting the projects
July-August 2023	Formatting and translation of the report
End of 2023	Publication of the finalised report

28

Projects and schemes benefiting from funds raised in 2022

50%

Proportion of projects and schemes renewed this year compared to last year

14

New projects and schemes benefiting from funds raised in 2022

8,1

Average number of UN Sustainable Development Goals to which each financed project or scheme directly contributes

## EVALUATION OF THE ALIGNMENT OF PROJECTS WITH THE EUROPEAN TAXONOMY

All the projects have been **selected in accordance with the regional eligibility criteria** defined within the framework of the green, social and sustainable bond issues of the Île-de-France Region.

Where possible, the evaluation by law of the alignment of projects with the 1st objective of European taxonomy "Climate change mitigation" has been achieved. The table below lists all the projects financed by 2022 borrowing aligned with the objective.

CLEAN TRANSPORTATION						
EUROPEAN TAXONOMY ACTIVITY	Technical criteria of the economic activity	DNSH criteria				
		Climate change adaptation	Sustainable use and protection of water and marine resources	Transition to a circular economy	Pollution prevention and control	Protection and restoration of biodiversity and ecosystems
<b>6.14. INFRASTRUCTURE FOR RAIL TRANSPORT</b>						
<b>Projects: subways</b>						
Subway line 4	Aligned	Aligned	Aligned	Aligned	Aligned	Aligned
Subway line 11	Aligned	Aligned	Aligned	Aligned	Aligned	Aligned
Subway line 14	Aligned	Aligned	Aligned	Aligned	Aligned	Aligned
<b>Projects: tramways</b>						
Tramway line T9	Aligned	Aligned	Aligned	Aligned	Aligned	Aligned
Tramway line T10	Aligned	Aligned	Aligned	Aligned	Aligned	Aligned
Tramway line T12	Aligned	Aligned	Aligned	Aligned	Aligned	Aligned
Tramway line T13 express	Aligned	Aligned	Aligned	Aligned	Aligned	Aligned
<b>Projets: railway links</b>						
EOLE	Aligned	Aligned	Aligned	Aligned	Aligned	Aligned
<b>6.15. INFRASTRUCTURE ENABLING LOW-CARBON ROAD TRANSPORT AND PUBLIC TRANSPORT</b>						
<b>Scheme: Development for buses on owns sites and layout of roadways</b>						
T ZEN 4	Aligned	Aligned	Aligned	Aligned	Aligned	Aligned

It is noted that France has implemented sufficient policies, regulations and frameworks in order to be aligned with the **minimum social safeguards** of the European taxonomy. Significant measures are being taken by the le-de-France Region in addition to the national framework to ensure its alignment with the minimum safeguards of the European taxonomy, as reflected under the Region's bond issues.



**PROJECT COMPLIANCE TO THE EU TAXONOMY**

**Climate change mitigation** ✓


*Climate change adaptation*

*Sustainable use and protection of water and marine resources*

*Transition to a circular economy*

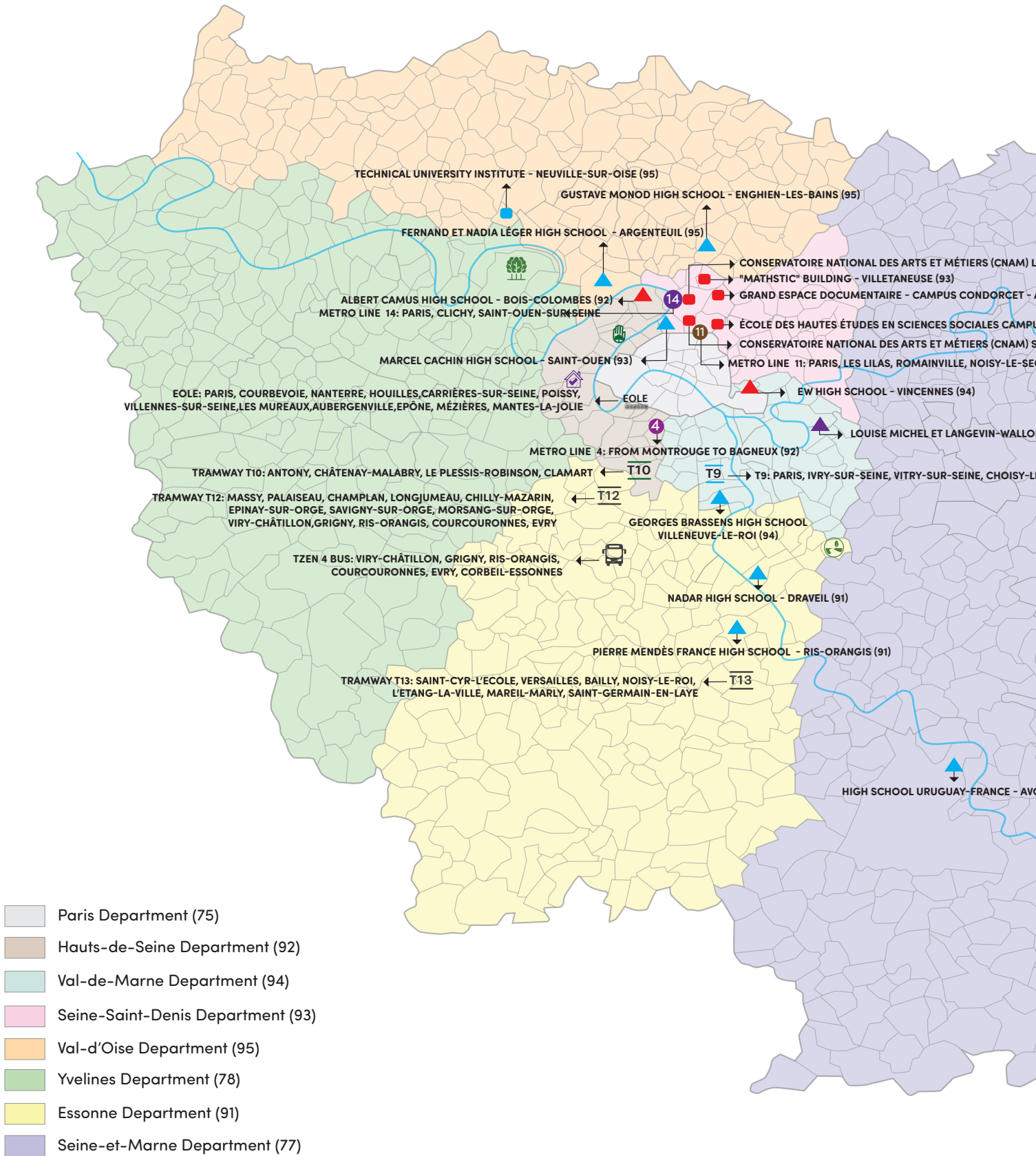
*Pollution prevention and control*

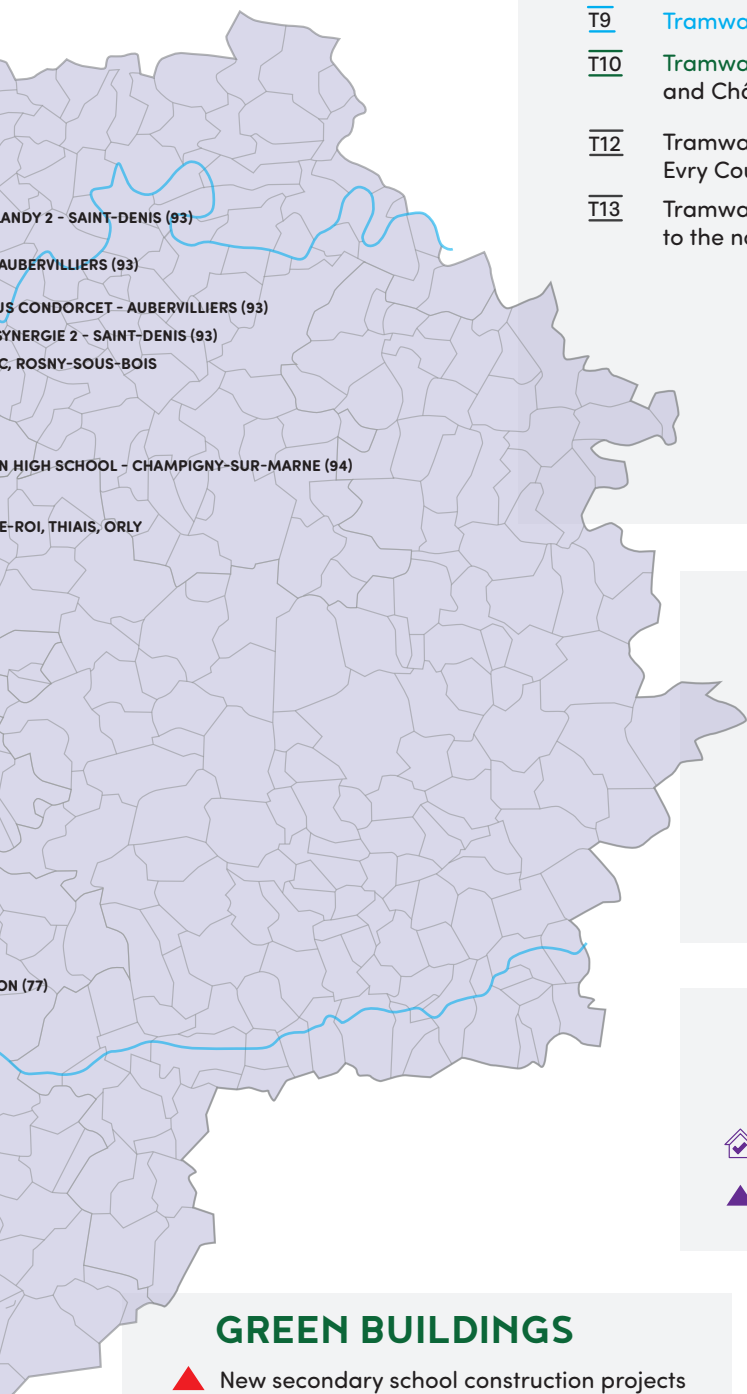
*Protection and restoration of biodiversity and ecosystems*










All the data relating to the alignment of the projects with regard to the regional eligibility criteria and the European taxonomy are available on the **Region's finance portal**: <https://www.iledefrance.fr/region-funding>


# Geographical map of the projects









## CLEAN TRANSPORTATION

-  **Metro Line 4:** extension to Bagneux
-  **Metro Line 11:** extension to Rosny-Bois-Perrier
-  **Metro Line 14:** Extension to Saint-Ouen
-  **Tramway T9:** new Metro Line between Paris and Orly city
-  **Tramway T10:** construction of a new tramway Metro Line between Antony and Châtenay-Malabry
-  **Tramway T12:** new Metro Line between Massy-Palaiseau and Evry Courcouronnes
-  **Tramway Metro Line T13 Express:** extension of the Great Western Belt to the north and south



 **EOLE** Paris, Courbevoie, Nanterre, Houilles, Carrières-sur-Seine, Poissy, Villennes-sur-Seine, Les Mureaux, Aubergenville, Epône, Mézières, Mantes-la-Jolie

 **TZEN 4:** Viry-Châtillon, Grigny, Ris-Orangis, Courcouronnes, Evry, Corbeil-Essonnes





## TERRESTRIAL AND AQUATIC BIODIVERSITY CONSERVATION

-  Restoration of Becon park - Courbevoie (92)
-  Creation of a public park - Saint-Germain-en-Laye (78)
-  Extension of the green corridor and creation of allotment gardens - Sartrouville (78)

## SOCIAL PROJECTS CATEGORIES

-  Social housing - Young workers residence - Sèvres (92)
-  Access to essential services (education): Louise-Michel and Langevin-Wallon high school - Champigny-sur-Marne (94)

## GREEN BUILDINGS

-  New secondary school construction projects
-  Secondary school renovation projects
-  Higher education construction projects
-  Higher education renovation projects

# Summary of impacts of projects and footprint of the 2022 green and sustainable bond

		Project purpose
<b>GREEN BUILDINGS</b>		
<i>New secondary school and boarding school construction projects</i>		
New high school in Vincennes (94)	<b>NEW PROJECT</b>	New build
Albert Camus high school in Bois-Colombes (92)		New build
<i>Secondary school renovation project</i>		
Nadar high school in Draveil (91)	<b>NEW PROJECT</b>	School restructuring and extension
Uruguay-France high school in Avon (77)	<b>NEW PROJECT</b>	School restructuring and extension
Pierre Mendès-France high school in Ris-Orangis (91)		School restructuring and extension
Marcel Cachin high school in Saint-Ouen (93)		School restructuring and extension
Gustave Monod high school in Enghien-les-Bains (77)	<b>NEW PROJECT</b>	School restructuring and extension
Fernand and Nadia Léger high school in Argenteuil (95)	<b>NEW PROJECT</b>	School restructuring and extension
Georges Brassens high school in Villeneuve-le-Roi (94)	<b>NEW PROJECT</b>	School restructuring and extension
<i>Higher education construction project</i>		
Grand Equipement Documentaire - Condorcet Campus		New build
Conservatoire National des Arts et Métiers (CNAM) - LANDY 2		New build
Conservatoire National des Arts et Métiers (CNAM) - SYNERGIE 2		New build
"Mathstic" building	<b>NEW PROJECT</b>	New build
<i>Higher education renovation project</i>		
IUT University in Neuville	<b>NEW PROJECT</b>	Building restoration and reconversion
<b>CLEAN TRANSPORTATION</b>		
<i>Projects: subways</i>		
Subway line 4		Extension to Bagneux
Subway line 11		Extension to Rosny-Bois-Perrier
Subway line 14		Extension to Saint-Ouen City Hall
<i>Projects: tramways</i>		
Tramway line T9		New line between Paris and Orly ville
Tramway line T10	<b>NEW PROJECT</b>	New line between Antony and Châtenay-Malabry
Tramway line T12		New line between Massy-Palaiseau and Evry Courcouronnes
Tramway line T13 Express	<b>NEW PROJECT</b>	Extension of the Great Belt link westwards and southwards
<i>Projects: railway links</i>		
EOLE		Extension of the RER E westwards
<i>Scheme: Development for buses on own sites and layout of roadways</i>		
T ZEN 4		New bus line between Viry-Châtillon and Corbeil-Essonnes
<b>TERRESTRIAL AND AQUATIC BIODIVERSITY CONSERVATION</b>		
<i>Green Spaces Agency Programs</i>		
Restoration of the Parc de Becon in Courbevoie	<b>NEW PROJECT</b>	Restoration of green spaces in Courbevoie
Creation of a public garden in Saint-Germain-en-Laye	<b>NEW PROJECT</b>	Creation of green spaces in Saint-Germain-en-Laye
Extension of the green corridor (section 7) and creation of public gardens in Sartrouville		Creation of green spaces in Sartrouville
<b>ACCESS TO ESSENTIAL SERVICES : EDUCATION</b>		
Louise Michel and Langevin-Wallon high schools in Champigny-sur-Marne (94)	<b>NEW PROJECT</b>	Louise Michel and Langevin-Wallon high schools global restructuring
<b>AFFORDABLE HOUSING</b>		
<i>Scheme: Support for social housing</i>		
Social residence - young workers' hostel	<b>NEW PROJECT</b>	Creation of a young workers' hostel
		<b>GREEN PROJECTS CATEGORIES TOTAL</b>
		<b>SOCIAL PROJECTS CATEGORIES TOTAL</b>
		<b>OVERALL TOTAL</b>

\*Sum of worksite FTE and operating FTE, including insertion FTE where appropriate.

Impact of projects and schemes submitted				Footprint of the 2022 green and sustainable bond (project impact weighted by the weight of the loan in the project financing)				
Total project cost in € million (1)	CO2 emissions (teq/year) avoided by the project	FTE supported by the project*	Number of project beneficiaries	Amount of 2022 green and sustainable borrowing allocated to the project in € million (2)	Weight (2) / (1)	CO2 emissions (teq/year) avoided by the project	FTE supported	Scope covered by the indicators (Amount carried forward/ Amount scheme)
47,0	100	512	1 050	20,4	43,4 %	43	-	52 %
64,5	49	350	1 470	18,8	29,2 %	14	102	48 %
31,5	13	180	1 310	8,3	26,4 %	3	-	12 %
43,8	22	240	1 700	10,0	22,9 %	5	-	15 %
48,2	90	270	1 200	8,7	18,0 %	16	-	13 %
62,4	56	365	1 200	9,4	15,1 %	8	55	14 %
42,0	189	245	1 000	11,1	26,4 %	50	-	17 %
29,1	14	165	1 100	10,7	36,9 %	5	61	16 %
65,5	10	370	1 200	8,8	13,5 %	1	50	13 %
102,3	285	262	30 950	0,1	0,1 %	0,2	0,1	0,3 %
38,8	10	101	801	11,9	30,5 %	3	31	72 %
19,0	19	57	181	4,4	23,2 %	4	13	27 %
9,1	14	66	414	0,1	0,9 %	0,1	1	1 %
25,2	48	90	1 490	0,9	3,7 %	2	-	100 %
307,1	570	2 180	755 800	16,6	5,4 %	31	118	16 %
1 298,0	3 255	9 216	331 000	81,5	6,3 %	204	-	81 %
1 380,0	7 310	9 798	176 000	2,7	0,2 %	14	19	3 %
403,3	1 338	2 863	70 000	9,4	2,3 %	31	-	6 %
351,0	31 237	-	170 000	49,6	14,1 %	4 413	0	29 %
526,0	2 534	4 095	40 000	73,5	14,0 %	354	572	43 %
434,8	1 116	2 178	21 000	36,7	8,5 %	94	184	22 %
5 509,0	8 040	26 554	1 400 000	273,0	5,0 %	398	1316	100 %
124,0	-	880	47 000	3,8	3,0 %	-	27	100 %
4,9	-	-	85 000	0,2	4,9 %	-	-	39 %
1,2	-	-	47 000	0,2	15,2 %	-	-	29 %
1,4	-	-	53 302	0,2	14,3 %	-	-	32 %
61,3	27	350	2 300	28,0	45,7 %	12	-	100 %
9,1	-	191	121	1,0	11,3 %	-	-	100 %
-	56 318	61 037	3 241 168	-	-	5 697	2 547,9	-
-	27	541	2 421	-	-	-	-	-
-	56 345	61 578	3 243 589	-	-	5 710	2 547,9	-

# Reading funded projects from the point of view of UN Sustainable Development Goals

- The next table compiles the contribution made by each project to the United Nations Sustainable Development Goals (SDG). This is assessed individually based on the specific features of each project as described in the sheets accompanying this report.
- For each project, the main Sustainable Development Goal is identified by **highlighting colour**.
- The projects have been assessed with respect to eleven goals out of seventeen (see Appendix 1.2 of this report [page 88]).
- The graph opposite indicates the scale of financing the main SDG by projects presented within in this report. It also highlights that financing allocated to SDG 11 "Sustainable cities and communities" dominates, which is consistent with both the nature of the Île-de-France Region as a regional authority and its predominantly urban character.

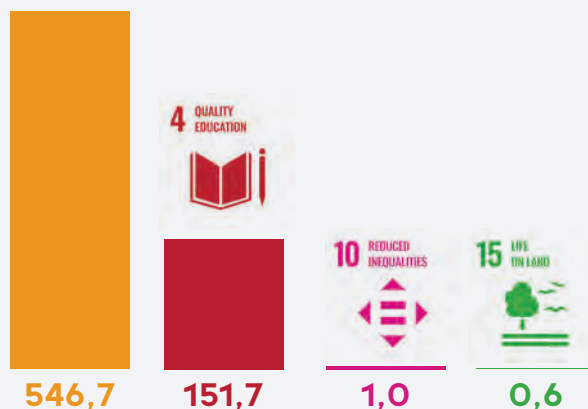


GREEN PROJECTS CATEGORIES			
New high school in Vincennes (94)		4.1	6.5
Albert Camus high school in Bois-Colombes (92)		4.1	6.5
Nadar high school in Draveil (91)		4.1	6.5
Uruguay-France high school in Avon (77)		4.1	6.5
Pierre Mendès-France high school in Ris-Orangis (91)		4.1	6.5
Marcel Cachin high school in Saint-Ouen (93)		4.1	6.5
Gustave Monod high school in Enghien-les-Bains (77)		4.1	6.5
Fernand and Nadia Léger high school in Argenteuil (95)		4.1	6.5
Georges Brassens high school in Villeneuve-le-Roi (94)		4.1	6.5
Grand Equipement Documentaire - Condorcet Campus		4.3	
Conservatoire National des Arts et Métiers (CNAM) - LANDY 2		4.3	6.5
Conservatoire National des Arts et Métiers (CNAM) - SYNERGIE 2		4.3	
"Mathstic" building		4.3	6.5
Technical University Institute in Neuville		4.3	6.5
Subway line 4	1.b		6.5
Subway line 11	1.b		
Subway line 14	1.b		
Tramway line T9	1.b		
Tramway line T10	1.b		
Tramway line T12	1.b		6.5
Tramway line T13 Express	1.b		
EOLE	1.b		
TZEN 4	1.b		
Restoration of the Parc de Becon in Courbevoie			
Creation of a public garden and extension of the Fontaine Sainte-Catherine in Saint-Germain-en-Laye			
Extension of the green corridor (section 7) and creation of public gardens in Sartrouville			6.4
SOCIAL PROJECTS CATEGORIES			
Louise Michel and Langevin-Wallon high schools in Champigny-sur-Marne (94)		4.1	6.5
Social residence - young workers' hostel			





## FUNDING OF MAIN SDGS (€M)



IMPACT INDICATOR OF THE MAIN SDG

### GREEN PROJECTS CATEGORIES

	7	8	9	10	11	12	13	15	IMPACT INDICATOR OF THE MAIN SDG	
		8.6	9.1	10.3	11.3	12.7	13.2	15.1	Number of beneficiaries	page 22
		8.6	9.1	10.3	11.3	12.7	13.2	15.1	Number of beneficiaries	page 24
		8.6	9.1	10.3	11.3	12.7	13.2	15.1	Number of beneficiaries	page 26
		8.6	9.1	10.3	11.3	12.7	13.2	15.1	Number of beneficiaries	page 28
7.2		8.6	9.1	10.3	11.3	12.7	13.2	15.1	Number of beneficiaries	page 30
		8.6	9.1	10.3	11.3	12.7	13.2	15.1	Number of beneficiaries	page 32
		8.6	9.1	10.3	11.3	12.7	13.2	15.1	Number of beneficiaries	page 34
		8.6	9.1	10.3	11.3	12.7	13.2	15.1	Number of beneficiaries	page 36
		8.6	9.1	10.3	11.3	12.7	13.2	15.1	Number of beneficiaries	page 38
		8.6	9.1	10.3	11.3	12.7	13.2	15.1	Number of beneficiaries	page 40
		8.6	9.1	10.3	11.3	12.7	13.2	15.1	Number of beneficiaries	page 42
		8.6	9.1	10.3	11.3	12.7	13.2	15.1	Number of beneficiaries	page 44
		8.6	9.1	10.3	11.3	12.7	13.2	15.1	Number of beneficiaries	page 46
		8.6	9.1	10.3	11.3	12.7	13.2	15.1	Number of beneficiaries	page 48
		8.3	9.1	10.2	11.2	12.7	13.2		CO2 emissions avoided by the project	page 52
		8.3	9.1	10.2	11.2	12.7	13.2		CO2 emissions avoided by the project	page 54
		8.3	9.1	10.2	11.2	12.7	13.2		CO2 emissions avoided by the project	page 56
		8.3	9.1	10.2	11.2	12.7	13.2	15.1	CO2 emissions avoided by the project	page 58
		8.3	9.1	10.2	11.2	12.7	13.2	15.1	CO2 emissions avoided by the project	page 60
		8.3	9.1	10.2	11.2	12.7	13.2		CO2 emissions avoided by the project	page 62
		8.3	9.1	10.2	11.2	12.7	13.2	15.1	CO2 emissions avoided by the project	page 64
		8.3	9.1	10.2	11.2	12.7	13.2		CO2 emissions avoided by the project	page 66
		8.3	9.1	10.2	11.2	12.7	13.2	15.1	CO2 emissions avoided by the project	page 68
				10.2	11.7	12.7	13.2	15.1	Number of beneficiaries	page 72
				10.2	11.7	12.7	13.2	15.1	Number of beneficiaries	page 74
				10.2	11.7	12.7	13.2	15.1	Number of beneficiaries	page 76

### SOCIAL PROJECTS CATEGORIES

	8.6	9.1	10.3	11.3	12.7	13.2	15.1	Nombre de bénéficiaires	page 80
	8.6	9.1	10.3	11.b	12.7	13.2	15.1	Nombre de bénéficiaires	page 84





## GREEN BUILDINGS

**Construction and renovation of buildings according to a sustainable development approach, contributing to respect for the environment and accessibility for persons with reduced mobility.**

The region has adopted a new provisional investment programme in 2017 for secondary schools in consultation with the local education authorities and communities in the Île-de-France region. This plan, revised in 2020, provides for an unprecedented effort benefiting Île-de-France secondary schools, with the creation of over 30,000 new places over 10 years. This ambition echoes demographic changes and new academic dynamics: an additional 65,500 secondary school students are expected in Île-de-France between 2012 and 2030, reflecting the region's growth.

The priority environmental objectives for forthcoming new construction projects will focus on bioclimatic design and energy management, site biodiversity and water management, air quality and acoustics, reduction to the nuisance caused by construction sites and waste management.

• **Development of sector-specific technical guidelines for sustainable development**, which constitute regional guides for integrating sustainable development concerns into projects.

• **Region's powers/responsibilities**: Mandatory for secondary schools, higher-education projects forming part of state-region relations

• **Types of actions:**

- Secondary schools: Contracting authority with representative
- Higher education: Subsidy or direct contracting authority

• **Target public**: Secondary school students, university students, teachers, researchers



# NEW SECONDARY SCHOOL IN VINCENNES (94)

NEW PROJECT

## New secondary school and boarding school construction projects



Purpose	Construction of a new secondary school with 1,050 places for general education in 30 classes
Location	Vincennes (94)
Key dates	- Notification of the global performance public contract: 29/12/2020 - Start of work: 05/11/2021 - End of work planned for the 2023 start of the school year
Total project cost	€470 million
Region's share (%) in the total amount of the project	50,0 %
2022 financing of the project through the green and sustainable bond	€20.4 million

### ► QUALITATIVE PRESENTATION OF THE PROJECT

- The construction of the new secondary school, located east of the municipality of Vincennes, should alleviate the crowding in the existing Hector-Berlioz secondary school. This new establishment will have a total capacity of 1,050 places for general education courses divided into 30 classes (10 classes for each of the years from Year 11 to Year 13).
- The project is part of an effort to make the school more energy efficient and reduce its carbon footprint by aiming to achieve levels E3C1 (school) and E3C2 (housing) of the E+C- benchmark. The project is adapted to climate change with a design that guarantees the comfort of the occupants during the summer.
- The project is located on a 3,670 m<sup>2</sup> plot previously occupied by abandoned industrial buildings. The municipalities of Vincennes and Fontenay-sous-Bois performed major soil decontamination work before the start of construction.
- The project complies with the Seine-Normandie Design and Water Management Scheme (SDAGE) for rainwater management with the provision of specific reservoirs and the reuse of rainwater to supply the sanitary facilities and irrigate the patio. The site's sealing is limited to 65%.

- The project is part of an approach to promoting biodiversity, in conjunction with the neighbourhood: 400 m<sup>2</sup> of untouched land, 50 m<sup>2</sup> educational garden, 38% of green roof area, etc.
- In order to preserve air quality, all materials used and in contact with the indoor air will have A+ eco-labels. Furthermore, filtration by G4 + F8 filters will be applied to the double flow ventilation to ensure that the building has good indoor air quality when it is in use.
- The programme provides for the use of bio-based materials up to level 1 of the bio-based label, i.e. 18 kg/m<sup>2</sup> SDP.

### ► PROJECT LIFECYCLE

- The work has already started. The structural work was completed in mid-February 2023. The acceptance is scheduled for the of end August 2023.
- At the end of the work, the project's global performance public contract provides for an operating/maintenance period by the owning group for 10 years.

### ► IMPACT INDICATORS

Indicator	Impact	Methodological note
FTE supported by the project	512 FTEs (410 construction FTE and 102 FTE operation)	A - 3 and C - 2
Number of project beneficiaries	1,050 students	D-1
CO2 emissions avoided by the project	100 teq CO <sub>2</sub> /year	E-4



## ► REGIONAL ELIGIBILITY CRITERIA

### CATEGORY ELIGIBILITY CRITERIA

All secondary schools starting from 2017: energy consumption level required < -40% compared to RT2012 (equivalent level E3C1 of the E+C- label)

- Consommation d'énergie primaire du bâtiment Cep réduit de 40% par rapport au Cep\_max de la RT2012 ;
- The building's primary energy consumption reduced by 40% compared to RT2012 PEC\_max
- Bioclimatic requirements of the Bbio building reduced by 30% compared to the RT2012 Bbio\_max
- Leakage tests will be carried out upon completion of the work.
- A life cycle analysis has been performed for the project.

## ► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

<p><b>Environmental management and eco-design of projects</b></p>	<ul style="list-style-type: none"> <li>• All the environmental aspects of the project were taken into account: bioclimatic design, biodiversity, water management, soil pollution, nuisances, health, etc.:</li> <li>• Objective of achieving levels E3C1 (school) and E3C2 (housing) of the E+C- benchmark</li> <li>• The project is adapted to climate change with a design that guarantees the comfort of the occupants during the summer.</li> <li>• The municipalities of Vincennes and Fontenay-sous-Bois performed major soil decontamination work before the start of construction.</li> <li>• The project complies with the Seine-Normandie Design and Water Management Scheme (SDAGE) for rainwater management with the provision of specific reservoirs and the reuse of rainwater to supply the sanitary facilities and irrigate the patio. The site's sealing is limited to 65%.</li> <li>• Enhancing biodiversity: 400 m<sup>2</sup> of untouched land, 50 m<sup>2</sup> educational garden, 38% of green roof area, etc.</li> <li>• In order to preserve air quality, all materials used and in contact with the indoor air will have A+ eco-labels.</li> <li>• The programme provides for the use of bio-based materials up to level 1 of the bio-based label, i.e. 18 kg/m<sup>2</sup> SDP.</li> </ul>
<p><b>Combating of climate change and promotion of the region's ecological transition</b></p>	<ul style="list-style-type: none"> <li>• The project is part of an effort to reduce its carbon footprint, with an analysis performed on its complete lifecycle.</li> </ul>
<p><b>Contribution to sustainable regional planning and improvement to the quality of life</b></p>	<ul style="list-style-type: none"> <li>• Rainwater management on the plot (green roofing, recovery tank). The maximum leakage rate of the SDAGE is respected.</li> <li>• The aim of the project is to reduce crowding in the existing Hector-Berlioz secondary school.</li> </ul>
<p><b>Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals</b></p>	<ul style="list-style-type: none"> <li>• The project provides for 20,000 hours of social integration that will be carried out as part of the global performance contract during the construction and/or operation phase of the contract.</li> <li>• The facility is accessible to persons with disabilities. It complies with fire safety regulations.</li> </ul>
<p><b>Respect for fundamental rights</b></p>	<ul style="list-style-type: none"> <li>• Combating social, educational and territorial inequalities</li> </ul>
<p><b>Responsible regional development</b></p>	<ul style="list-style-type: none"> <li>• The new school was designed to benefit student learning conditions (acoustic and thermal comfort, capacity of adapted spaces, etc.). It is therefore part of the development of a quality educational offer in the region.</li> </ul>
<p><b>Regional economic development</b></p>	<ul style="list-style-type: none"> <li>• The construction site and the school's operations generate jobs (including a substantial part of local jobs).</li> </ul>
<p><b>Fair practices, responsible purchasing and responsible supplier relations</b></p>	<ul style="list-style-type: none"> <li>• Compliance with the criteria/rules of the region and the public procurement code.</li> <li>• Strict standards on the choice of construction products and equipment (bio-based materials, lifecycle analysis, etc.).</li> </ul>
<p><b>Promotion of a suitable consultation procedure with internal and external stakeholders</b></p>	<ul style="list-style-type: none"> <li>• This project is part of the Provisional Secondary School Programme, which is drawn up in consultation between the rectorate and the region.</li> <li>• The municipalities of Vincennes and Fontenay-sous-Bois are also stakeholders in the project (provision of the building site, etc.).</li> </ul>

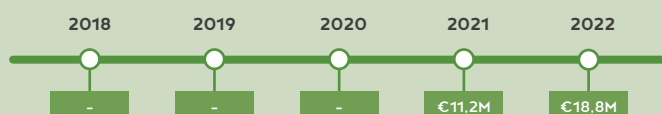


# ALBERT CAMUS SECONDARY SCHOOL IN BOIS-COLOMBES (92)

## Secondary school renovation projects



Purpose	Total renovation and extension of the capacity by 400 places
Location	Bois-Colombes
Key dates	<ul style="list-style-type: none"> <li>- Project management competition in 2015-2016</li> <li>- Studies in 2017 to 2019</li> <li>- Start of construction in mid-2021</li> <li>- Handover scheduled for All Saints' Day 2023</li> </ul>
Total project cost	€64.5 million
Region's share (%) in the total amount of the project	100,0%
2022 financing of the project through the green and sustainable bond	€18.8 million
History of project financing by the Region's previous green and sustainable bonds	



### ► QUALITATIVE PRESENTATION OF THE PROJECT

- The operation consists partly in the renovation of some of the existing buildings as well as the expansion of them. It also provides for the creation of a boarding school and the reconstruction of tied accommodation.
- The operation is performed while keeping students on site, therefore using a "staggered" operation and setting up temporary chalets on the adjoining sports field.
- Eventually, the educational structure will bring the total school population to 1,470 students across 42 classes, which is an additional 420 places compared to the theoretical capacity before the work.
- The desired environmental objectives are based on the regional planning tools (green plan, Let's Change the Air plan, etc.) and on the regulations in force.

- The achievement of low-consumption energy objectives in the restructured buildings (80 kWh/m<sup>2</sup>/year of primary energy consumption) and in the new building for the extension and the boarding school (50 kWh/m<sup>2</sup>/year).
- Comprehensive environmental approach focused on water management, energy, air quality, acoustics and maintenance, make it possible to achieve high standards in terms of bioclimatic design

### ► PROJECT LIFECYCLE

- Work started in mid-2021, with the creation of a temporary secondary school, helping to free up space at the start of the 2021 All Saint's Day holidays and thus allowing the renovation work to begin.
- Acceptance of the work is expected to take place in November 2023.

### ► IMPACT INDICATORS

Indicator	Impact	Methodological note
FTE supported by the project	350 FTEs	A-2
Number of project beneficiaries	1,470 students	D-1
CO2 emissions avoided by the project	48.96 teq CO <sub>2</sub> /year	E-1



## ► REGIONAL ELIGIBILITY CRITERIA

### CATEGORY ELIGIBILITY CRITERIA :

Tous les lycées à compter de 2017 : niveau de consommation énergétique exigé < -40% par rapport à RT 2012 (équivalent niveau E3C1 du Label E+C-).

- New buildings (extension): primary energy consumption reduced through the use of renewable energy is estimated at 36.8 kWhep/m<sup>2</sup>/year, i.e. 40% lower than the maximum primary energy consumption calculated by RT2012 (61.3 kWhep/m<sup>2</sup>/year).
- Renovated buildings: the primary energy consumption (56.48 kWhep/m<sup>2</sup>/year) is reduced by 70% compared to the initial consumption (181.57 kWhep/m<sup>2</sup>/year).

## ► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

<p><b>Environmental management and eco-design of projects</b></p>	<ul style="list-style-type: none"> <li>• Specification defining the environmental requirements.</li> <li>• Minimal nuisance worksite" charter: many objectives for limiting nuisances in the environment, with in particular waste traceability and a minimum recovery requirement of 70% by mass (demolition + construction).</li> <li>• Environmental monitoring of each phase by a specialist assistant to the contracting authority.</li> </ul>
<p><b>Combating of climate change and promotion of the region's ecological transition</b></p>	<ul style="list-style-type: none"> <li>• Achievement of <b>energy objectives: low consumption in the restructured buildings (80 kWh/m<sup>2</sup> net floor area) and in the new building for the extension and the boarding school (50 kWh/m<sup>2</sup> net floor area). These objectives are designed to reduce greenhouse gas emissions.</b></li> <li>• Limited flows for plumbing facilities (taps, WC, urinals).</li> <li>• Rainwater recovery in a 30 m<sup>3</sup> tank which can be used to supply a large part of the sanitary requirements (WC and urinals) and watering for the project and save a volume of drinking water estimated at 1,100 m<sup>3</sup>/year.</li> <li>• Green roofs for the most part, in order to be integrated as much as possible in the heavily revegetated context</li> </ul>
<p><b>Contribution to sustainable regional planning and improvement to the quality of life</b></p>	<ul style="list-style-type: none"> <li>• <b>Rainwater management on the plot</b> (presence of swales, retention basin and infiltration basin) The maximum leakage rate of 2 L/s/ha is complied with.</li> <li>• Maintenance of composters already implemented</li> </ul>
<p><b>Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals</b></p>	<ul style="list-style-type: none"> <li>• Accessibility for persons with disabilities to all establishments open to the public.</li> </ul>
<p><b>Respect for fundamental rights</b></p>	<ul style="list-style-type: none"> <li>• Combating social, educational and territorial inequalities</li> </ul>
<p><b>Responsible regional development</b></p>	<ul style="list-style-type: none"> <li>• Programmes contributing to provide <b>diversified and quality education</b> in the region</li> <li>• An on-site <b>boarding school</b> ensures wide geographical recruitment of students.</li> </ul>
<p><b>Regional economic development</b></p>	<ul style="list-style-type: none"> <li>• Support for employment during construction, support for integration employment and recruitment of reception, maintenance, catering and accommodation staff within the school</li> </ul>
<p><b>Fair practices, responsible purchasing and responsible supplier relations</b></p>	<ul style="list-style-type: none"> <li>• Compliance with the criteria/rules of the region and the public procurement code.</li> <li>• Requirements on the choice of construction products and equipment (to save on natural resources, etc.)</li> </ul>
<p><b>Promotion of a suitable consultation procedure with internal and external stakeholders</b></p>	<ul style="list-style-type: none"> <li>• This project is part of the Provisional Secondary School Programme, which is drawn up in consultation between the rectorate and the region.</li> <li>• Before voting on the project, the secondary school board of directors (under the authority of the headmaster) and the mayor of the municipality are informed by official letter of the regional intention to launch studies in anticipation for carrying out renovations or construction. This opens up a period of dialogue with the school community in order to fine-tune the needs and define the programme's main directions.</li> </ul>



# NADAR SECONDARY SCHOOL IN DRAVEIL (91)

NEW PROJECT

## Secondary school renovation projects



Purpose	600-place expansion of the Nadar Secondary School
Location	Draveil
Key dates	<ul style="list-style-type: none"> <li>- Public contract posted in December 2021</li> <li>- Start of work in July 2022</li> <li>- End of work planned for the 2025 start of the school year</li> </ul>
Total project cost	€31.5 million
Region's share (%) in the total amount of the project	50,0%
2022 financing of the project through the green and sustainable bond	€8.3 million

### ► QUALITATIVE PRESENTATION OF THE PROJECT

- The objective of the proposed operation is to transform the establishment into a comprehensive secondary school by expanding its capacity by 600 places to meet the population growth of the Nord Essonne sector.
- To meet this increase in the student body, the project provides for the creation of nearly 3,000 m<sup>2</sup> of usable space. The creation of new teaching spaces and the expansion of existing functions (such as the documentation and information centre, the administration centre, school living facilities and half-board facilities) will make it possible to develop general and technological education programmes and, over the long term, enrol 1,310 students.
- The project is part of an effort to make the school more energy efficient and reduce its carbon footprint by aiming to achieve level E3C1 of the E+C- benchmark for the extension. The project is adapted to climate change with a design that guarantees the comfort of the occupants during the summer.
- The design of the project respects the principle of zero waste for rainwater. This is managed on the site by creating green roofs. Some of the rainwater will also be recovered in a tank to then be used in the secondary school's sanitary facilities.
- The pollution studies carried out have not revealed any soil pollution problems in the areas earmarked for the future extensions.

- Landscaping plays a major role in green spaces: conversion of the current square courtyard into a tree-covered lawn area, green terraces, creation of a 20 m<sup>2</sup> educational garden, etc.
- In order to preserve air quality, all materials used and in contact with the indoor air will have A+ eco-labels. The premises will be ventilated by double-flow air handling units with energy recovery from the extracted air.

### ► PROJECT LIFECYCLE

- The work has already started with phase 1: demolition/restructuring of the existing half-board facilities, workshops and indoor gallery.
- Start of phase 2 planned for early 2024: construction of the new building
- Acceptance scheduled for the 2025 start of the school year

### ► IMPACT INDICATORS

Indicator	Impact	Methodological note
FTE supported by the project	180 FTEs	A-3
Number of project beneficiaries	1,310 students	D-1
CO <sub>2</sub> emissions avoided by the project	12,5 teq CO <sub>2</sub> /year	E-4



► **REGIONAL ELIGIBILITY CRITERIA**

**CATEGORY ELIGIBILITY CRITERIA :**

> **Renovation of buildings according to a sustainable development approach, contributing to respect for the environment**

> **Reduction in primary energy consumption (PEC) of at least 30%.**

- New building (extension): the primary energy consumption (taking into account the production of renewable energy) is estimated at 48.6 kWhep/m<sup>2</sup>/year, i.e. 43% lower than the maximum primary energy consumption calculated by RT2012 (85.3 kWhep/m<sup>2</sup>/year).

► **JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA**

<p><b>Environmental management and eco-design of projects</b></p>	<ul style="list-style-type: none"> <li>• All the environmental aspects of the project were taken into account: bioclimatic design, biodiversity, water management, soil pollution, nuisances, health, etc. (see above).</li> </ul>
<p><b>Combating of climate change and promotion of the region's ecological transition</b></p>	<ul style="list-style-type: none"> <li>• The project is part of an effort to reduce its carbon footprint, with the E3C1 level obtained for the new building.</li> </ul>
<p><b>Contribution to sustainable regional planning and improvement to the quality of life</b></p>	<ul style="list-style-type: none"> <li>• Rainwater management on the plot (green roofing, recovery tank). The maximum leakage rate of the SDAGE is respected.</li> <li>• Biodiversity is developed through revegetation efforts carried out on the current square courtyard, the creation of green roofs and an educational garden.</li> </ul>
<p><b>Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals</b></p>	<ul style="list-style-type: none"> <li>• The facility is accessible to persons with disabilities. It complies with fire safety regulations.</li> </ul>
<p><b>Respect for fundamental rights</b></p>	<ul style="list-style-type: none"> <li>• Combating social, educational and territorial inequalities.</li> </ul>
<p><b>Responsible regional development</b></p>	<ul style="list-style-type: none"> <li>• The project was designed to benefit student learning conditions (acoustic and thermal comfort, capacity of adapted spaces, etc.). It is therefore part of the development of a quality educational offer in the region.</li> </ul>
<p><b>Regional economic development</b></p>	<ul style="list-style-type: none"> <li>• The construction site and the project's operations generate jobs (including a substantial part of local jobs).</li> </ul>
<p><b>Fair practices, responsible purchasing and responsible supplier relations</b></p>	<ul style="list-style-type: none"> <li>• Compliance with the criteria/rules of the region and the public procurement code.</li> <li>• Strict standards on the choice of construction products and equipment (bio-based materials, resource saving, etc.).</li> </ul>
<p><b>Promotion of a suitable consultation procedure with internal and external stakeholders</b></p>	<ul style="list-style-type: none"> <li>• This project is part of the Provisional Secondary School Programme, which is drawn up in consultation between the rectorate and the region.</li> <li>• Before voting on the project, the secondary school board of directors (under the authority of the headmaster) and the mayor of the municipality are informed by official letter of the regional intention to launch studies in anticipation for carrying out renovations or construction. This opens up a period of dialogue with the school community in order to fine-tune the needs and define the programme's main directions.</li> </ul>

## URUGUAY-FRANCE SECONDARY SCHOOL IN AVON (77)

NEW PROJECT

## Secondary school renovation projects



Purpose	Restructuring of buildings C, D, E, F and creation of a new boarding school with 200 beds
Location	Avon
Key dates	Project management bidding competition in 2013-2015 Studies in 2017-2020 Start of construction at the end of 2020 Reception scheduled for the 2024 start of the school year
Total project cost	€43.8 million
Region's share (%) in the total amount of the project	100,0%
2022 financing of the project through the green and sustainable bond	€10.0 million

## ► QUALITATIVE PRESENTATION OF THE PROJECT

- The project plans for the partial restructuring of the existing buildings and the creation of a new boarding school for the Uruguay France secondary school in Avon:
  - Complete restructuring of existing buildings C, D, E and F to create new classrooms
  - Creation of a dormitory building located at the entrance to the secondary school
  - Outdoor space landscaping and development (green spaces, roads, networks, fences).
- The project is part of an effort to make the school more energy efficient and reduce its carbon footprint. The project is adapted to climate change with a design that guarantees hygrothermal comfort for the occupants.
- The design of the project respects the principle of zero waste for rainwater. This is managed on the site by creating green roofs, water traps, retention basins and a vegetation covered car park. The project increases the permeability of the site.

- The landscaping programme includes the implantation of indigenous species from the Fontainebleau Forest in the heart of the patio, with a recreated condensed biotope of flora promoting the spontaneous arrival of fauna. Protected and noteworthy species are emphasised for educational purposes.
- In order to preserve air quality, all materials used and in contact with the indoor air have suitable eco-labels.
- The visual comfort of the users has been particularly developed by providing optimised and variable daylight to the space.

## ► PROJECT LIFECYCLE

- The work started at the end of 2020.
- Acceptance scheduled for the 2024 start of the school year.

## ► IMPACT INDICATORS

Indicator	Impact	Methodological note
FTE supported by the project	240 FTEs	A-3
Number of project beneficiaries	1,500 students 200 internes	D-1
CO2 emissions avoided by the project	22,2 teq CO <sub>2</sub> /year	E-4





► REGIONAL ELIGIBILITY CRITERIA

<p><b>CATEGORY ELIGIBILITY CRITERIA :</b>          &gt; Renovation of buildings according to a sustainable development approach, contributing to respect for the environment          &gt; Reduction in primary energy consumption (PEC) of at least 30%.</p>	<ul style="list-style-type: none"> <li>Boarding school: primary energy consumption is estimated at 41.7 kWhep/m<sup>2</sup>/year, i.e. 60% lower than the maximum primary energy consumption calculated by RT2012 (108 kWhep/m<sup>2</sup>/year).</li> </ul>
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► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

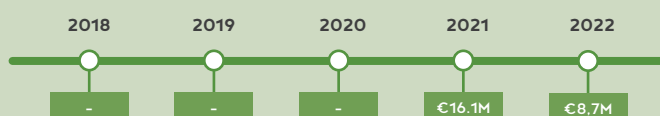
<p><b>Environmental management and eco-design of projects</b></p>	<ul style="list-style-type: none"> <li>All the environmental aspects of the project were taken into account: bioclimatic design, biodiversity, water management, disturbances, health, etc. (see above).</li> </ul>
<p><b>Combating of climate change and promotion of the region's ecological transition</b></p>	<ul style="list-style-type: none"> <li>The project is part of an effort to reduce its carbon footprint, with a significant reduction in the energy consumption of new and renovated buildings.</li> </ul>
<p><b>Contribution to sustainable regional planning and improvement to the quality of life</b></p>	<ul style="list-style-type: none"> <li>Rainwater management on the plot (green roofing, vegetation covering, swales). The zero-waste initiative is respected up to the 30-year rainfall return period.</li> <li>Biodiversity is developed through the greening of the central patio in line with the ecosystems of the Fontainebleau Forest where the secondary school is located.</li> </ul>
<p><b>Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals</b></p>	<ul style="list-style-type: none"> <li>The facility is accessible to persons with disabilities. It complies with fire safety regulations.</li> </ul>
<p><b>Respect for fundamental rights</b></p>	<ul style="list-style-type: none"> <li>Combating social, educational and territorial inequalities.</li> </ul>
<p><b>Responsible regional development</b></p>	<ul style="list-style-type: none"> <li>The dormitory buildings were designed to benefit <b>student learning and living conditions</b> (acoustic and thermal comfort, capacity of adapted spaces, etc.). It is therefore part of the development of a quality educational offer in the region.</li> <li>The dormitories also allow students living in geographically remote areas to attend the school. nés.</li> </ul>
<p><b>Regional economic development</b></p>	<ul style="list-style-type: none"> <li>The construction site and the project's operations <b>generate jobs</b> (including a substantial part of local jobs).</li> </ul>
<p><b>Fair practices, responsible purchasing and responsible supplier relations</b></p>	<ul style="list-style-type: none"> <li>Compliance with the criteria/rules of the region and the public procurement code.</li> <li>Strict standards on the choice of construction products and equipment (bio-based materials, resource saving, etc.).</li> </ul>
<p><b>Promotion of a suitable consultation procedure with internal and external stakeholders</b></p>	<ul style="list-style-type: none"> <li>This project is part of the Provisional Secondary School Programme, which is drawn up in consultation between the rectorate and the region.n.</li> <li>Before voting on the project, the secondary school board of directors (under the authority of the headmaster) and the mayor of the municipality are informed by official letter of the regional intention to launch studies in anticipation for carrying out renovations or construction. This opens up a period of dialogue with the school community in order to fine-tune the needs and define the programme's main directions.</li> </ul>

# PIERRE MENDES FRANCE SECONDARY SCHOOL IN RIS-ORANGIS

## Secondary school renovation projects



Purpose	Total renovation and 600-place expansion
Location	Ris-Orangis
Key dates	Project management bidding competition in 2017 Studies in 2018-2019 Start of construction at the end of 2020 Handover scheduled for All Saints' Day 2023
Total project cost	€48.2 million
Region's share (%) in the total amount of the project	100,0%
2022 financing of the project through the green and sustainable bond	€8.7 million
History of project financing by the Region's previous green and sustainable bonds	



### ► QUALITATIVE PRESENTATION OF THE PROJECT

- The operation involves the transformation of a vocational secondary school into a comprehensive secondary school, doubling the school population which will increase from 600 students to 1,200.
  - To do this requires approximately:
    - 6,000 m<sup>2</sup> of demolition
    - 8,500 m<sup>2</sup> of newly constructed facilities
    - 1,550 m<sup>2</sup> of restructuring
    - 3,800 m<sup>2</sup> of renovation (Building B)
- The desired environmental objectives are based on the regional planning tools (green plan, Let's Change the Air plan, etc.) and on the regulations in force.

- The energy 3 and carbon 1 level E3C1 will be achieved, as will level 1 for the bio-based building label, based on an overall environmental approach focused on water management, energy, air quality, acoustics and maintenance.

### ► PROJECT LIFECYCLE

- Work started in 2020, with the creation of a 3,500 m<sup>2</sup> temporary secondary school and the related roads and service developments (roads and parking) delivered in November 2020.
- Work on the total renovation of the secondary school was then able to start following this handover with the handover of the new building in 2022, before finalising the renovation of Building B and the outdoor spaces in 2023.
- Acceptance of the work is expected to take place in November 2023.

### ► IMPACT INDICATORS

Indicator	Impact	Methodological note
FTE supported by the project	270 FTEs	A-2
Number of project beneficiaries	1,200 students	D-1
CO2 emissions avoided by the project	90 teq CO <sub>2</sub> /year	E-1



## ► REGIONAL ELIGIBILITY CRITERIA

### CATEGORY ELIGIBILITY CRITERIA :

- > Renovation of buildings according to a sustainable development approach, contributing to respect for the environment
- > Reduction in primary energy consumption (PEC) of at least 30%.

- New building (extension): the primary energy consumption is estimated at 28.8 kWhep/m<sup>2</sup>/year, i.e. 56% lower than the maximum primary energy consumption calculated by RT2012 (65.3 kWhep/m<sup>2</sup>/year).
- Renovated Building A: the primary energy consumption (64.6 kWhep/m<sup>2</sup>/year) is reduced by 35% compared to the initial consumption (98.7 kWhep/m<sup>2</sup>/year).

## ► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

<b>Environmental management and eco-design of projects</b>	<ul style="list-style-type: none"> <li>• Specification defining the environmental requirements.</li> <li>• Minimal nuisance worksite" charter: many objectives for limiting nuisances in the environment, with in particular waste traceability and a minimum recovery requirement of 70% by mass (demolition + construction).</li> <li>• Environmental monitoring of each phase by a specialist assistant to the contracting authority.é.</li> </ul>
<b>Combating of climate change and promotion of the region's ecological transition</b>	<ul style="list-style-type: none"> <li>• Achievement of level E3C1 (Energy 3 and Carbon 1) designed to reduce greenhouse gas emissions</li> <li>• Installation of a collective thermal solar facility for the dormitory</li> <li>• Installation of photovoltaic panels on the roof of the maintenance building</li> <li>• Limited flows for plumbing facilities (taps, WC, urinals).</li> <li>• Use of bio-based materials (level 1 of the bio-based building label: 18kg/m<sup>2</sup> is achieved).</li> </ul>
<b>Contribution to sustainable regional planning and improvement to the quality of life</b>	<ul style="list-style-type: none"> <li>• Rainwater management on the plot (presence of swales, retention basin and infiltration basin) The maximum leakage rate of 2 L/s/ha is complied with.</li> <li>• Green roofs deployed on new buildings</li> <li>• Implementation of permeable surfaces on the playgrounds.</li> <li>• Creation of 3 specific collection areas for green waste.</li> <li>• The footprint of the constructed buildings is largely based on the demolished buildings, to limit the impact on the flora.</li> <li>• The species used in the landscaped areas of the site are mostly native plants adapted to the site's climatic conditions.</li> </ul>
<b>Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals</b>	<ul style="list-style-type: none"> <li>• Accessibility for persons with disabilities to all establishments open to the public.</li> </ul>
<b>Respect for fundamental rights</b>	<ul style="list-style-type: none"> <li>• Combating social, educational and territorial inequalities.</li> </ul>
<b>Responsible regional development</b>	<ul style="list-style-type: none"> <li>• Programmes contributing to provide diversified and quality education in the region.</li> </ul>
<b>Regional economic development</b>	<ul style="list-style-type: none"> <li>• Support for employment during construction, support for integration employment and recruitment of reception, maintenance, catering and accommodation staff within the school.</li> </ul>
<b>Fair practices, responsible purchasing and responsible supplier relations</b>	<ul style="list-style-type: none"> <li>• Compliance with the criteria/rules of the region and the public procurement code.</li> <li>• Requirements on the choice of construction products and equipment (to save on natural resources, etc.)</li> </ul>
<b>Promotion of a suitable consultation procedure with internal and external stakeholders</b>	<ul style="list-style-type: none"> <li>• This project is part of the Provisional Secondary School Programme, which is drawn up in consultation between the rectorate and the region.</li> <li>• Before voting on the project, the secondary school board of directors (under the authority of the headmaster) and the mayor of the municipality are informed by official letter of the regional intention to launch studies in anticipation for carrying out renovations or construction. This opens up a period of dialogue with the school community in order to fine-tune the needs and define the programme's main directions.</li> </ul>



# MARCEL CACHIN SECONDARY SCHOOL IN SAINT-OUEN (93)

NEW PROJECT

## Secondary school renovation projects



Purpose	Reconstruction on Marcel Cachin Secondary School site
Location	Saint-Ouen (93)
Key dates	Call for bids on the Global Performance Public Contract in 2018-2019 Start of construction in 2020 Acceptance scheduled for the 2023 start of the school year
Total project cost	€62.4 million
Region's share (%) in the total amount of the project	100 %
2022 financing of the project through the green and sustainable bond	€9.4 million

### ► QUALITATIVE PRESENTATION OF THE PROJECT

- L'opération consiste à reconstruire l'ensemble des locaux d'enseignement général and professionnel, salles banales, pôle science, ateliers sur une surface utile d'environ 11 600 m<sup>2</sup> avec une volonté d'intégrer un campus dédié aux métiers du sport.
- The operation consists of rebuilding all the general and professional teaching premises, common areas, science hub, workshops on a usable area of about 11,600 m<sup>2</sup> with the aim to integrate a campus dedicated to sports professions.
- The operation will also provide a comfortable life at the establishment with the creation of a documentation and information centre, unlike the initial school, and a multi-purpose hall with 150 spots, the development of school living spaces for teachers and students, and the expansion of the catering service.
- The project includes the reuse of materials from the demolition of the former school and the use of 18 kg/m<sup>2</sup>SDP of bio-sourced materials (particularly for the housing made from a wooden structure).
- The project is part of an effort to make the school more energy efficient and reduce its carbon footprint. The project is adapted to climate change with a design that guarantees the comfort of the occupants during the summer.

- The design of the project respects the principle of zero waste for a 10-year rainfall return period. This rainfall is managed on site using green roofs, a porous concrete courtyard, car parks with a cobblestone/grass surface and a rainwater reuse tank.
- The landscaping includes many green spaces, with many green roofs in particular, and trees play a central role in the design.
- The project provides optimal indoor air quality through the use of certified materials and the installation of hygienic ventilation with filtration.
- The acoustic comfort of users is integrated into the "basic" HQE design.

### ► PROJECT LIFECYCLE

- The project started in 2020.
- Acceptance scheduled for the 2023 start of the school year
- At the end of the work, the project's global performance public contract provides for an operating/maintenance period by the owning group for 10 years.

### ► IMPACT INDICATORS

Indicator	Impact	Methodological note
Worksite FTE supported by the project	365 FTEs	A-3
Number of project beneficiaries	1,200 students	D-1
Emissions de CO <sub>2</sub> évitées par le projet	56 teqCO <sub>2</sub> /year	E-4





## ► REGIONAL ELIGIBILITY CRITERIA

### CATEGORY ELIGIBILITY CRITERIA :

- > Renovation of buildings according to a sustainable development approach, contributing to respect for the environment
- > Reduction in primary energy consumption (PEC) of at least 30%.

- For the secondary school, workshop and housing, primary energy consumption is estimated at 42.2 kWh/m<sup>2</sup>/year, 23.1 kWh/m<sup>2</sup>/year and 25.4 kWh/m<sup>2</sup>/year respectively, i.e. 49%, 62% and 61% less than the maximum consumption calculated by RT2012 (82.4, 60.5 and 65.6 kWh/m<sup>2</sup>/year respectively).

## ► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

<b>Environmental management and eco-design of projects</b>	<ul style="list-style-type: none"> <li>• All the environmental aspects of the project were taken into account: bioclimatic design, biodiversity, water management, disturbances, health, etc. (see above).</li> </ul>
<b>Combating of climate change and promotion of the region's ecological transition</b>	<ul style="list-style-type: none"> <li>• The project is part of an effort to reduce its carbon footprint, with a significant reduction in the energy consumption of the buildings in comparison with the standard and the former school.</li> </ul>
<b>Contribution to sustainable regional planning and improvement to the quality of life</b>	<ul style="list-style-type: none"> <li>• Rainwater management on the plot (green roofing, recovery tank). The zero-waste initiative is respected for a 10-year rainfall return period.</li> <li>• The site's biodiversity and trees are emphasised in the landscaping project.</li> </ul>
<b>Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals</b>	<ul style="list-style-type: none"> <li>• The facility is accessible to persons with disabilities. It complies with fire safety regulations.</li> </ul>
<b>Respect for fundamental rights</b>	<ul style="list-style-type: none"> <li>• Combating social, educational and territorial inequality.</li> </ul>
<b>Responsible regional development</b>	<ul style="list-style-type: none"> <li>• The new building was designed to benefit student learning and living conditions (acoustic and thermal comfort, capacity of adapted spaces, etc.). It is therefore part of the development of a quality educational offer in the region.</li> </ul>
<b>Regional economic development</b>	<ul style="list-style-type: none"> <li>• The construction site and the project's operations generate jobs (including a substantial part of local jobs).</li> </ul>
<b>Fair practices, responsible purchasing and responsible supplier relations</b>	<ul style="list-style-type: none"> <li>• Compliance with the criteria/rules of the region and the public procurement code.</li> <li>• Strict standards on the choice of construction products and equipment (bio-based materials, resource saving, etc.).</li> </ul>
<b>Promotion of a suitable consultation procedure with internal and external stakeholders</b>	<ul style="list-style-type: none"> <li>• This project is part of the Provisional Secondary School Programme, which is drawn up in consultation between the rectorate and the region.</li> <li>• Before voting on the project, the secondary school board of directors (under the authority of the headmaster) and the mayor of the municipality are informed by official letter of the regional intention to launch studies in anticipation for carrying out renovations or construction. This opens up a period of dialogue with the school community in order to fine-tune the needs and define the programme's main directions.</li> </ul>

# GUSTAVE MONOD SECONDARY SCHOOL IN ENGHIEEN-LES-BAINS (95)

NEW PROJECT

## Secondary school renovation projects



Purpose	Demolition, reconstruction, extension and restructuring of buildings on the site west of Gustave Monod Secondary School (vocational school)
Location	Saint-Gratien (95)
Key dates	Project management bidding competition in 2013–2014 Studies in 2015–2017 Start of construction in 2019 Acceptance scheduled for the 2023 start of the school year
Total project cost	€42.0 million
Region's share (%) in the total amount of the project	100,0%
2022 financing of the project through the green and sustainable bond	€11.1 million

### ► QUALITATIVE PRESENTATION OF THE PROJECT

- The project provides for the technical and heritage upgrade of the building structure and educational spaces of the western site of the secondary school (vocational education):
  - New distribution of educational spaces planned for a site shared by everyone
  - Brick building renovation
  - Demolition of the workshops and the north building and construction of the new, larger north building to accommodate the new workshops
  - Construction of a new building (Building E connecting to the general school) for the documentation and information centre and the faculty lounge
  - Construction of the building containing the multi-purpose hall
- The project is part of an effort to make the school more energy efficient and reduce its carbon footprint. The project is adapted to

climate change with a design that guarantees the comfort of the occupants during the winter.

- The project's design limits rainwater waste to 1 L/s/ha for a 10-year rainfall return period. This is managed on the site by creating green roofs, swales, retention basins and a rainwater recovery tank.
- Implementation of systems to significantly reduce potable water consumption (-50% for renovated buildings).
- Landscape involves increasing revegetation on the site with tree species to maintain the diversity found on the site while reducing the risk of allergens.
- The visual and acoustic comfort of the users was particularly improved through models that optimise natural light and indoor acoustics.

### ► PROJECT LIFECYCLE

- The work started in summer 2019.
- Acceptance scheduled for the 2023 start of the school year.

### ► IMPACT INDICATORS

Indicator	Impact	Methodological note
Worksite FTE supported by the project	245 FTEs	A-3
Number of project beneficiaries	1,000	D-1
CO2 emissions avoided by the project	189,1 teq CO <sub>2</sub> /year	E-4



## ► REGIONAL ELIGIBILITY CRITERIA

### CATEGORY ELIGIBILITY CRITERIA :

- > Renovation of buildings according to a sustainable development approach, contributing to respect for the environment
- > Reduction in primary energy consumption (PEC) of at least 30%.

- New buildings (workshops, extensions of existing buildings, documentation and information centre and multi-purpose hall): the primary energy consumption is estimated at 42.1 kWhep/m<sup>2</sup>/year, i.e. 52% lower than the maximum primary energy consumption calculated by RT2012 (88.1 kWhep/m<sup>2</sup>/year).
- Renovated buildings: The primary energy consumption is estimated at 61.4 kWhep/m<sup>2</sup>/year, i.e. 74% lower than the initial consumption, calculated to be 237 kWhep/m<sup>2</sup>/year.

## ► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

<b>Environmental management and eco-design of projects</b>	<ul style="list-style-type: none"> <li>• All the environmental aspects of the project were taken into account: bioclimatic design, biodiversity, water management, disturbances, health, etc. (see above).</li> </ul>
<b>Contribution à la lutte contre le changement climatique and à la transition écologique du territoire</b>	<ul style="list-style-type: none"> <li>• The project is part of an effort to reduce its carbon footprint, with a significant reduction in the energy consumption of new and renovated buildings.</li> </ul>
<b>Contribution à l'aménagement durable du territoire et à l'amélioration de la qualité de vie</b>	<ul style="list-style-type: none"> <li>• Rainwater management on the plot (green roofs, retention and recovery basin) Water waste flow is limited to 1 L/s/ha for a 10-year rainfall return period.</li> <li>• The revegetation on site is increased.</li> </ul>
<b>Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals</b>	<ul style="list-style-type: none"> <li>• The facility is accessible to persons with disabilities. It complies with fire safety regulations.</li> </ul>
<b>Respect for fundamental rights</b>	<ul style="list-style-type: none"> <li>• Combating social, educational and territorial inequalities</li> </ul>
<b>Responsible regional development</b>	<ul style="list-style-type: none"> <li>• The new buildings were designed to benefit student learning and living conditions (acoustic and thermal comfort, capacity of adapted spaces, etc.). It is therefore part of the development of a quality educational offer in the region.</li> </ul>
<b>Regional economic development</b>	<ul style="list-style-type: none"> <li>• The construction site and the project's operations generate jobs (including a substantial part of local jobs).</li> </ul>
<b>Fair practices, responsible purchasing and responsible supplier relations</b>	<ul style="list-style-type: none"> <li>• Compliance with the criteria/rules of the region and the public procurement code.</li> <li>• Strict standards on the choice of construction products and equipment (bio-based materials, resource saving, etc.).</li> </ul>
<b>Promotion of a suitable consultation procedure with internal and external stakeholders</b>	<ul style="list-style-type: none"> <li>• This project is part of the Provisional Secondary School Programme, which is drawn up in consultation between the rectorate and the region.</li> <li>• Before voting on the project, the secondary school board of directors (under the authority of the headmaster) and the mayor of the municipality are informed by official letter of the regional intention to launch studies in anticipation for carrying out renovations or construction. This opens up a period of dialogue with the school community in order to fine-tune the needs and define the programme's main directions.</li> </ul>

# FERNAND AND NADIA LÉGER SECONDARY SCHOOL IN ARGENTEUIL (95)

NEW PROJECT

## Secondary school renovation projects



<b>Purpose</b>	<b>Demolition and reconstruction of the school's main building</b>
<b>Location</b>	<b>Argenteuil (95)</b>
<b>Key dates</b>	<b>Project management bidding competition in 2015-2017</b> <b>Studies in 2017-2020</b> <b>Start of construction in the beginning of 2021</b> <b>Acceptance scheduled for the end of 2024</b>
<b>Total project cost</b>	<b>€29.1 million</b>
<b>Region's share (%) in the total amount of the project</b>	<b>100 %</b>
<b>2022 financing of the project through the green and sustainable bond</b>	<b>€10.7 million</b>

### ► QUALITATIVE PRESENTATION OF THE PROJECT

- La présente opération s'inscrit dans une démarche plus vaste qui a débuté par la démolition du bâtiment des ateliers. Elle est l'achèvement de la recomposition globale du lycée.
- This operation is part of a more extensive project which began with the demolition of the workshop building. It is the completion of the school's overall reconfiguration.
- The operation aims to demolish the main school building and the housing/administration building and replace them with a single building with 6,450 m<sup>2</sup> net floor area, which houses the tied accommodation, teaching and school and social life functions. This reconstruction will restructure the school in order to reconfigure it into a coherent and logically laid out facility.
- The project is part of an effort to make the school more energy efficient and reduce its carbon footprint. The project is adapted to climate change with a design that guarantees the comfort of the occupants during the summer.
- The project's design limits rainwater waste to 1 L/s/ha for a 10-year rainfall return period. This is managed on the site by creating green roofs, swales, retention basins and a vegetation covered car park. The project also provides for rainwater recovery for sanitary facilities and watering.

- The project integrates water-saving systems to reduce the water requirement for the entire project by 45% compared to a traditional school.
- The project also includes intelligent landscaping: adapted, non-allergenic, trees and species, wet environment species for swales and retention basins.
- A composting area is provided for the on-site recovery of fermentable waste produced by the half-board facilities and the maintenance of green spaces.
- The structure's design reduces noise pollution from the neighbouring railway line.

### ► PROJECT LIFECYCLE

- The work started at the end of 2020.
- Acceptance scheduled for the end of 2024 so teaching and administration functions can be moved into the new building at the beginning of 2025.

### ► IMPACT INDICATORS

Indicator	Impact	Methodological note
Worksite FTE supported by the project	165 FTEs	A-3
Number of project beneficiaries	1 100	D-1
CO2 emissions avoided by the project	13,5 teq CO <sub>2</sub> /year	E-4





## ► REGIONAL ELIGIBILITY CRITERIA

### CATEGORY ELIGIBILITY CRITERIA :

- > Renovation of buildings according to a sustainable development approach, contributing to respect for the environment
- > Reduction in primary energy consumption (PEC) of at least 30%.

- The primary energy consumption is estimated at 46.9 kWhep/m<sup>2</sup>/year for the whole structure (school + dormitory), i.e. 40% lower than the maximum primary energy consumption calculated by RT2012 (78 kWhep/m<sup>2</sup>/year).

## ► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

<b>Environmental management and eco-design of projects</b>	<ul style="list-style-type: none"> <li>• All the environmental aspects of the project were taken into account: bioclimatic design, biodiversity, water management, nuisances, health, etc.</li> </ul>
<b>Contribution à la lutte contre le changement climatique and à la transition écologique du territoire</b>	<ul style="list-style-type: none"> <li>• The project is part of an effort to reduce its carbon footprint, with a significant reduction in the energy consumption of the new building in comparison with the demolished buildings.</li> </ul>
<b>Contribution to sustainable regional planning and improvement to the quality of life</b>	<ul style="list-style-type: none"> <li>• Rainwater management on the plot (green roofing, vegetation covering, swales). Water waste is limited to 1L/s/ha for a 10-year rainfall return period.</li> <li>• Biodiversity is developed with the introduction of specific woodland areas.</li> </ul>
<b>Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals</b>	<ul style="list-style-type: none"> <li>• The facility is accessible to persons with disabilities. It complies with fire safety regulations.</li> </ul>
<b>Respect for fundamental rights</b>	<ul style="list-style-type: none"> <li>• Combating social, educational and territorial inequalities.</li> </ul>
<b>Responsible regional development</b>	<ul style="list-style-type: none"> <li>• The building was designed to benefit student learning and living conditions (acoustic and thermal comfort, capacity of adapted spaces, etc.). It is therefore part of the development of a quality educational offer in the region.</li> </ul>
<b>Regional economic development</b>	<ul style="list-style-type: none"> <li>• The construction site and the project's operations generate jobs (including a substantial part of local jobs).</li> </ul>
<b>Fair practices, responsible purchasing and responsible supplier relations</b>	<ul style="list-style-type: none"> <li>• Compliance with the criteria/rules of the region and the public procurement code.</li> <li>• Strict standards on the choice of construction products and equipment (bio-based materials, resource saving, etc.).</li> </ul>
<b>Promotion of a suitable consultation procedure with internal and external stakeholders</b>	<ul style="list-style-type: none"> <li>• This project is part of the Provisional Secondary School Programme, which is drawn up in consultation between the rectorate and the region.</li> <li>• Before voting on the project, the secondary school board of directors (under the authority of the headmaster) and the mayor of the municipality are informed by official letter of the regional intention to launch studies in anticipation for carrying out renovations or construction. This opens up a period of dialogue with the school community in order to fine-tune the needs and define the programme's main.</li> </ul>

# GEORGES BRASSENS SECONDARY SCHOOL IN VILLENEUVE-LE-ROI (94) NEW PROJECT

## Secondary school renovation projects



Purpose	Comprehensive restructuring and extension of the secondary school
Location	Villeneuve-le-Roi (94)
Key dates	Project management bidding competition in 2018 Studies in 2019 Start of demolition work in mid-2019 and start of reconstruction work in early 2021 Acceptance scheduled for the 2025 start of the school year
Total project cost	€65.5 million
Region's share (%) in the total amount of the project	100,0 %
2022 financing of the project through the green and sustainable bond	€8.8 million

### ► QUALITATIVE PRESENTATION OF THE PROJECT

- The Georges Brassens regional school complex located in Villeneuve le Roi was constructed in the 1960s. It is located on the edge of a business area.
- The mixed Georges Brassens complex was composed of 5 buildings (administration/accommodation, secondary school, college, half-board facility/information and documentation centre and sports hall). These buildings were showing severe deterioration and had many non-conformities. That is why it was decided to completely redevelop the site. The major objective underlying this total restructuring of the site is to split the college and the secondary school and create two autonomous and independent schools.
- The objective is to create a secondary school with the capacity for 1,200 students, a half-board facilities, the extension of the sports hall and outdoor sports facilities.
- This operation therefore includes:
  - The demolition of building A "administration/accommodation" with a net floor area of approximately 1,621 m<sup>2</sup> which will be completely cleaned of asbestos before it is demolished

- The construction of several extensions with a total surface area of nearly 6,000 m<sup>2</sup>
- The complete restructuring of certain elements
- The desired environmental objectives are based on the regional planning tools (green plan, Let's Change the Air plan, etc.) and on the regulations in force.
- The energy 2 and carbon E2C1 level will be achieved, as will level 1 for the bio-based building label, built on an overall environmental approach focused on water management, energy, air quality, acoustics and maintenance.

### ► PROJECT LIFECYCLE

- The former structure was demolished between mid-2019 and 2021 with reconstruction starting after that.
- Acceptance of the works is expected to take place at the 2025 start of the school year.

### ► IMPACT INDICATORS

Indicator	Impact	Methodological note
Worksite FTE supported by the project	370 FTEs	A-2
Number of project beneficiaries	1,200 students	D-1
CO2 emissions avoided by the project	10,2 teq CO <sub>2</sub> /year	E-1



► REGIONAL ELIGIBILITY CRITERIA

<p><b>CATEGORY ELIGIBILITY CRITERIA :</b></p> <ul style="list-style-type: none"> <li>&gt; Renovation of buildings according to a sustainable development approach, contributing to respect for the environment</li> <li>&gt; Reduction in primary energy consumption (PEC) of at least 30%.</li> </ul>	<ul style="list-style-type: none"> <li>• Renovated buildings (teaching): the primary energy consumption (70.5 kWhep/m<sup>2</sup>/year) is reduced by 34% compared to the initial consumption (107 kWhep/m<sup>2</sup>/year).</li> <li>• The new buildings (reception, half-board facilities, gym and housing) show gains compared to the PEC_max of RT2012 of 20%, 28%, 22% and 32% respectively. It should be noted that these buildings replace existing buildings and offer a significant improvement in energy performance.</li> </ul>
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► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

<p><b>Environmental management and eco-design of projects</b></p>	<ul style="list-style-type: none"> <li>• Specification defining the environmental requirements.</li> <li>• “Minimal nuisance worksite” charter: many objectives for limiting nuisances in the environment, with in particular waste traceability and a minimum recovery requirement of 70% by mass (demolition + construction).</li> <li>• Environmental monitoring of each phase by a specialist assistant to the contracting authority.</li> </ul>
<p><b>Combating of climate change and promotion of the region’s ecological transition</b></p>	<ul style="list-style-type: none"> <li>• Achievement of low energy consumption targets (see above).</li> <li>• Installation of a thermodynamic balloons.</li> <li>• Rainwater from the roof of the reception building is directed to a 40 m<sup>3</sup> rainwater collection tank which can be used to supply a large part of the sanitary requirements (WC and urinals).</li> <li>• Green roofs for the most part, in order to be integrated as much as possible in the heavily revegetated context</li> <li>• Use of bio-based materials (level 1 of the bio-based building label: 18kg/m<sup>2</sup> is achieved).</li> <li>• Nearly 10% of the soil excavated is reused on site.</li> </ul>
<p><b>Contribution to sustainable regional planning and improvement to the quality of life</b></p>	<ul style="list-style-type: none"> <li>• Rainwater management on the plot (presence of swales, retention basin and infiltration basin) The maximum leakage rate of 2 L/s/ha is complied with.</li> <li>• The fact that the operation is carried out on partially flood-prone land is taken into account.</li> <li>• Improved soil permeability with a 10% reduction in the sealing coefficient compared with its initial condition.</li> <li>• Completion of a four-season flora/fauna study that identified the lack of protected species on the site.</li> </ul>
<p><b>Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals</b></p>	<ul style="list-style-type: none"> <li>• Accessibility for persons with disabilities to all establishments open to the public.</li> </ul>
<p><b>Respect for fundamental rights</b></p>	<ul style="list-style-type: none"> <li>• Combating social, educational and territorial inequalities</li> </ul>
<p><b>Responsible regional development</b></p>	<ul style="list-style-type: none"> <li>• Programmes contributing to provide diversified and quality education in the region</li> </ul>
<p><b>Regional economic development</b></p>	<ul style="list-style-type: none"> <li>• Support for employment during construction, support for integration employment and recruitment of reception, maintenance, catering and accommodation staff within the school.</li> </ul>
<p><b>Fair practices, responsible purchasing and responsible supplier relations</b></p>	<ul style="list-style-type: none"> <li>• Compliance with the criteria/rules of the region and the public procurement code.</li> <li>• Requirements on the choice of construction products and equipment (to save on natural resources, etc.)</li> </ul>
<p><b>Promotion of a suitable consultation procedure with internal and external stakeholders</b></p>	<ul style="list-style-type: none"> <li>• This project is part of the Provisional Secondary School Programme, which is drawn up in consultation between the rectorate and the region.</li> <li>• Before voting on the project, the secondary school board of directors (under the authority of the headmaster) and the mayor of the municipality are informed by official letter of the regional intention to launch studies in anticipation for carrying out renovations or construction. This opens up a period of dialogue with the school community in order to fine-tune the needs and define the programme’s main directions.</li> </ul>



# LARGE DOCUMENTATION FACILITY - HUMATHEQUE (CONDORCET CAMPUS)

Higher education construction project



Purpose	New building
Location	Campus Condorcet - Aubervilliers
Key dates	Early takeover on 29 March 2021
Total project cost	€102.3 million
Region's share (%) in the total amount of the project	100,0 %
2022 financing of the project through the green and sustainable bond	€0.1 million
History of project financing by the Region's previous green and sustainable bonds	



## ► QUALITATIVE PRESENTATION OF THE PROJECT

- The construction of the Grand Espace Documentaire (Large Documentation Facility) is supported by the Île-de-France region which is the contracting authority and provides 100% of the financing. Like the School of Advanced Studies in the Social Sciences (EHESS), this operation is an integral part of the Condorcet Campus development project, supported by the Condorcet Campus public institution (EPCS).
- The Elisabeth de Portzamparc architecture agency was appointed as authorised project manager for conducting the studies and monitoring this operation. The building has a surface floor area of 23,020 m<sup>2</sup> spread out over six floors plus a basement. The H-shaped building is structured around an atrium.
- The Large Documentation Facility, the heart of the Condorcet Campus, brings together collections currently located in forty-five separate

libraries and will be a leading scientific facility for Île-de-France researchers in Literature, Human and Social Sciences (LSHS) as well as for all national research organisations in human and social sciences.

## ► PROJECT LIFECYCLE

- At this stage:
  - Opening to all academic communities in September 2022.
  - Events and trade fairs were held in the Humathèque.
- Forthcoming:
  - Remaining reserves and construction completion bond being lifted
  - Structural damage warranty applied: Damage to doors/windows eliminated at the end of May 2023

## ► IMPACT INDICATORS

Indicator	Impact	Methodological note
Worksite FTE supported by the project	262 FTE (245 site FTE and 17 insertion FTE)	A-1 and B
Number of project beneficiaries	30,950	D-11
CO2 emissions avoided by the project	285 teq CO <sub>2</sub> /year	E-3



► REGIONAL ELIGIBILITY CRITERIA

**CATEGORY ELIGIBILITY CRITERIA :**

- > Construction of buildings according to a sustainable development approach, contributing to respect for the environment
- > All higher education buildings starting from 2017: energy consumption level required < -20% compared to RT 2012 (equivalent level E3C1 of the E+C- label).

- PEC = 50.6 kWhep/m<sup>2</sup>/year, i.e. a gain of 29% compared to the maximum PEC (PEC RT 2012 -29%). CO<sub>2</sub> emissions avoided by the project: 143.92 teq CO<sub>2</sub>/year 15.1 kg/m<sup>2</sup> of wood and bio-based materials
- Assistance to the contracting authority to develop and monitor the environmental programme from planning up to 1 year after the handover of the building.
- Broader environmental approach: grey energy, indoor air quality, autonomy in natural light, bio-based materials.
- Green site charter limiting nuisances.
- Optimisation of the bioclimatic design such as: BBIO ≤ BBIOMAX
- Non-pollutant and low VOC emitting (volatile organic compounds) materials used
- Natural nocturnal ventilation and absence of air conditioning
- Strong plant presence with the green terraces and the presence of gardens to the north and south of the building used for effectively combating heat islands.
- Project located near the "Front Populaire" metro station.

► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

<p><b>Environmental management and eco-design of projects</b></p>	<ul style="list-style-type: none"> <li>• Assistance to the contracting authority to develop and monitor the environmental programme incorporating sustainable development skills and project management specialising in sustainable development</li> <li>• Environmental quality initiative based on the CERTIVEA reference system for the environmental quality of buildings - "Tertiary Buildings" - September 2011, 2015 version.</li> <li>• Dashboard of environmental requirements, derived from a sustainable design and construction regional guide</li> <li>• The U-shaped layout of the building cuts through a large, 1,876 m<sup>2</sup> south-facing garden. This large central garden stands in front of the façade of the university and acts as a transition to the public space. It is a sheltered inner courtyard garden, an interior space to which all the areas of the university open, and also a landscaped showcase of the school in the public space. It helps combat urban heat islands.</li> <li>• The façade cladding made of white composite panels ensures optimum external insulation and controlled installation. The façades thus guarantee long-term construction lifecycle. This is an important point given the proximity of the buildings to the ring road and its disturbances.</li> </ul>
<p><b>Combating of climate change and promotion of the region's ecological transition</b></p>	<ul style="list-style-type: none"> <li>• BRT-40% low energy consumption and low carbon initiative aiming at an E3C1 level in anticipation of the new environmental regulation RE2020</li> <li>• The heat production required for the building's needs: heating of the premises, fresh air heating and ventilation will be provided by a heating substation connected to the CPCU network circulating nearby.</li> <li>• The installation of dual-flow ventilation helps to limit consumption by recovering heat from the air extracted from the rooms to preheat the fresh air. The efficiency of the heat recovery unit will be higher than 80%.</li> <li>• The installation of long balconies on the floors providing access for façade maintenance and functioning as sun screens</li> <li>• The use of adiabatic cooling in tutoring rooms, offices and the library helps to cool the supply air while reducing the use of refrigerant and refrigerant-free compressors (in keeping with the "ozone depletion" concern) and thus contribute to summer comfort</li> <li>• More than one third of the terraces contain vegetation (7,029 m<sup>2</sup> of built ground area for 2,517 m<sup>2</sup> of green terraces in the project) They cannot be accessed for safety reasons: the only outdoor spaces accessible on the upper floors are the elevated, peripheral walkways for teachers and staff on the fourth and fifth floors.</li> <li>• A 40 m<sup>3</sup> rainwater collection tank is installed in the basement of the building. It is intended to collect water from inaccessible roofs for reuse in irrigation.</li> <li>• Waste management charter: monitoring of quantities produced and collected, sorting according to the types of waste on site, optimisation of their recovery (for at least 70% of waste in relation to the total mass of waste generated) and prioritising local channels (less than 30 km away).</li> <li>• Thermal calculation results PEC = 47.90 kWhep/m<sup>2</sup> SHONRT.an ≤ PEC max = 80.40 kWhep/m<sup>2</sup> SHONRT.an.             <ul style="list-style-type: none"> <li>- Either a PEC = PEC max - 40.42%</li> <li>- Either a Bbio = Bbio max - 24.32%</li> <li>- CO<sub>2</sub> = 3 kg.CO<sub>2</sub>/m<sup>2</sup>/year ≤ 10 kg.CO<sub>2</sub>/m<sup>2</sup>.an.</li> </ul> </li> </ul>
<p><b>Contribution to sustainable regional planning and improvement to the quality of life</b></p>	<ul style="list-style-type: none"> <li>• Rebalancing of the education offer in the north of Paris at the Aubervilliers and Porte de la Chapelle sites</li> <li>• Protection of student life from the noise and visual nuisance of the ring road interchange and the Paris Charles-De-Gaulle Express motorway.</li> </ul>
<p><b>Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals</b></p>	<ul style="list-style-type: none"> <li>• PRM regulations taken into account</li> <li>• Safety study conducted</li> </ul>
<p><b>Respect for fundamental rights</b></p>	<ul style="list-style-type: none"> <li>• Improved working conditions for students and teachers with high-performance workspaces and a catering and student lifestyle offering.</li> </ul>
<p><b>Responsible regional development</b></p>	<ul style="list-style-type: none"> <li>• Implementation of professional integration jobs in the operational phase</li> </ul>
<p><b>Regional economic development</b></p>	<ul style="list-style-type: none"> <li>• The operation represents 144 jobs for the construction phase.</li> </ul>
<p><b>Fair practices, responsible purchasing and responsible supplier relations</b></p>	<ul style="list-style-type: none"> <li>• Requirements on the choice of construction products (reduction in use of natural resources, CO<sub>2</sub> emissions, etc.).</li> <li>• Requirements on the source of materials (limitation of grey energy).</li> </ul>
<p><b>Promotion of a suitable consultation procedure with internal and external stakeholders</b></p>	<ul style="list-style-type: none"> <li>• Ensuring that future managers are properly trained by the installer and that an explicit and complete service/maintenance logbook is drawn up Integration of future operators as early as possible taken into consideration Several training sessions will be planned for all technical equipment and more specifically for centralised technical management: one before the start of operation, a second one after 6 months and a final one after one year to ensure proper use of the installed equipment.</li> </ul>



# CONSERVATOIRE NATIONAL DES ARTS ET MÉTIERS (CNAM) LANDY 2 NEW PROJECT

## Higher education construction project



Purpose	New building
Location	Saint-Denis - Aubervilliers
Key dates	Construction phase started in September 2021 - Handover scheduled for the 4th quarter of 2023
Total project cost	€38.8 million
Region's share (%) in the total amount of the project	79,4 %
2022 financing of the project through the green and sustainable bond	€11.8 million
History of project financing	



### ► QUALITATIVE PRESENTATION OF THE PROJECT

- The construction of the building is supported by the Île-de-France region which is the contracting authority and provides 80% of the financing.
- The TANK architecture agency was appointed as authorised project manager for conducting the studies and monitoring this operation. The building has a mixed wood-concrete frame and three floors. An indoor garden is created along with two green links to the existing building.
- The project is used to develop the existing apprentice training centre (CFA), which it will eventually be an extension of, so it can

accommodate over 1,000 trainees. In addition to the educational areas, a library and documentation centre, a 400-seat restaurant, administrative offices and server hosting are planned.

### ► PROJECT LIFECYCLE

- At this stage: Work started on 22 March 2021. earthworks and structural works completed, construction on exterior in progress, 60% of the south building's interior completed.
- Forthcoming: Handover of the building by mid-October 2023.

### ► IMPACT INDICATORS

Indicator	Impact	Methodological note
Worksite FTE supported by the project	101 FTE (89 site FTE and 12 insertion FTE)	A-1 and B
Number of project beneficiaries	801	D-11
CO2 emissions avoided by the project	10 teq CO <sub>2</sub> /year	E-2



► **REGIONAL ELIGIBILITY CRITERIA**

<p><b>CATEGORY ELIGIBILITY CRITERIA :</b></p> <ul style="list-style-type: none"> <li>&gt; Construction of buildings according to a sustainable development approach, contributing to respect for the environment</li> <li>&gt; All higher education buildings starting from 2017: energy consumption level required &lt; -20% compared to RT 2012 (equivalent level E3C1 of the E+C- label).</li> </ul>	<ul style="list-style-type: none"> <li>• RT-30%. CO2 emissions avoided by the project 10 teq CO2/year</li> <li>• Assistance to the contracting authority to develop and monitor the environmental programme from planning up to six months after the handover of the building</li> <li>• Environmental programme prioritising energy efficiency, maintenance and durability of the structures</li> <li>• Green site charter limiting nuisances</li> <li>• Energy ambition surpassing the regulatory requirements, amounting to a 30% reduction in consumption</li> <li>• Natural nocturnal ventilation and absence of air conditioning</li> <li>• Substantial plant presence with the development of an indoor garden and a green roof used for effectively combating heat islands</li> <li>• Four parking spaces are reserved for electric vehicles, with charging points</li> <li>• A secure, covered bike shelter</li> <li>• Alternative rainwater management using ditches and a retention basin Recovery for watering green spaces.</li> </ul>
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► **JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA**

<p><b>Environmental management and eco-design of projects</b></p>	<ul style="list-style-type: none"> <li>• Assistance to the contracting authority to develop and monitor the environmental programme from planning up to six months after the handover of the building</li> <li>• Environmental programme prioritising energy efficiency, maintenance and durability of the structures</li> <li>• Green site charter limiting nuisances</li> </ul>
<p><b>Combating of climate change and promotion of the region's ecological transition</b></p>	<ul style="list-style-type: none"> <li>• Energy ambition surpassing the regulatory requirements, amounting to a 30% reduction in consumption</li> <li>• Natural nocturnal ventilation and absence of air conditioning</li> <li>• Substantial plant presence with the development of an indoor garden and a green roof used for effectively combating heat islands</li> <li>• Four parking spaces are reserved for electric vehicles, with charging points</li> <li>• A secure, covered bike shelter</li> <li>• Alternative rainwater management using ditches and a retention basin Recovery for watering green spaces</li> </ul>
<p><b>Contribution to sustainable regional planning and improvement to the quality of life</b></p>	<ul style="list-style-type: none"> <li>• Regional rebalancing of the education offer</li> </ul>
<p><b>Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals</b></p>	<ul style="list-style-type: none"> <li>• Creation of professional integration hours</li> <li>• Allocation of works contracts facilitating access to public procurement for SMEs-VSEs</li> </ul>
<p><b>Respect for fundamental rights</b></p>	<ul style="list-style-type: none"> <li>• Improved working conditions for trainees by offering them dedicated spaces.</li> </ul>
<p><b>Responsible regional development</b></p>	<ul style="list-style-type: none"> <li>• The project will enable the development of the CNAM apprenticeship training centre (CFA), in terms of both student capacity and new proposed curriculums. Given the institution's strong local roots, local populations, in particular young people, will be the first to benefit from this project.</li> <li>• The project is therefore intended to reinforce the qualifications of the region's populations. It also meets the skills requirements of local businesses.</li> </ul>
<p><b>Regional economic development</b></p>	<ul style="list-style-type: none"> <li>• The operation represents 89 jobs for the construction phase.</li> <li>• Implementation of professional integration jobsn.</li> </ul>
<p><b>Fair practices, responsible purchasing and responsible supplier relations</b></p>	<ul style="list-style-type: none"> <li>• Requirements on the choice of construction products (reduction in use of natural resources, CO2 emissions, etc.).</li> </ul>
<p><b>Promotion of a suitable consultation procedure with internal and external stakeholders</b></p>	<ul style="list-style-type: none"> <li>• Ongoing consultation with future users (CNAM) and the regional authority.</li> </ul>



QR Code for accessing the project website: <https://cnam-idf.fr/>

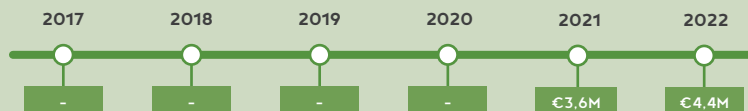
# CONSERVATOIRE NATIONAL DES ARTS ET MÉTIERS (CNAM) SYNERGIE 2

## Higher education and research construction project



Purpose	New building
Location	Saint Denis - Aubervilliers
Key dates	Construction phase started in September 2021 - Handover scheduled for the 4th quarter of 2023
Total project cost	€19.0 million
Region's share (%) in the total amount of the project	90%
2022 financing of the project through the green and sustainable bond	€4.4 million

### History of the financing of the project by previous green and responsible loans of the Region



### ► QUALITATIVE PRESENTATION OF THE PROJECT

- The construction of the building is supported by the Île-de-France region which is the contracting authority and provides financing, with a 10% contribution from the CNAM.
- The GM Architecture agency (Jean Guervilly and Françoise Mauffret) has been appointed as authorised project manager for conducting the studies and monitoring this operation. The building is located on land that was previously fully developed and provides a vegetated space to the south of the plot. The building has four floors.
- The project provides accommodation for the CNAM's biology laboratories, currently located in unsuitable and dilapidated premises and teaching rooms. The building's architecture is simple, compact and functional. It satisfies the important technical requirements related to the activity of the busy laboratories and promotes the pooling of spaces and equipment.s.

### ► PROJECT LIFECYCLE

- At this stage:
  - Roofing completed: 30 March 2023
  - 50% of exterior brick cladding applied
  - AHU/transformer equipment in place
- Forthcoming:
  - Pre-Acceptance Operations: August 2023
  - Acceptance and safety commission September 2023.

### ► IMPACT INDICATORS

Indicator	Impact	Methodological note
FTE supported by the project	57.13 FTE (52 site FTE and 5.13 insertion FTE)	A-1 and B
Number of project beneficiaries	181	D-11
CO2 emissions avoided by the project	19.09 teq CO <sub>2</sub> /year	E-2





## ► REGIONAL ELIGIBILITY CRITERIA

### CATEGORY ELIGIBILITY CRITERIA :

- > Construction of buildings according to a sustainable development approach, contributing to respect for the environment
- > All higher education buildings starting from 2017: energy consumption level required < -20% compared to RT 2012 (equivalent level E3C1 of the E+C- label).

- Project designed on the basis of the "Sustainable Design and Construction Guide" drawn up by the region in the area of university and research real estate.
- Environmental profile of the operation presented in the resource document "Environmental Note" drawn up by TERA0 at the project planning stage. It aims for the Exemplary level for site nuisances, water quality, quality of outdoor areas, energy savings, water management, operations and project management.
- The project aims at the Effnergie+ level, i.e. PEC RT2012 -20%, and reaches the E2 level at the project planning stage, i.e. 81.5 kWh/m<sup>2</sup>/year (in "ACV (E+C-) established by TERA0 at the project planning stage.
- A LCA study has been carried out, the C1 level of the E+C- label is targeted and reached at the project planning stage.

## ► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

<b>Environmental management and eco-design of projects</b>	<ul style="list-style-type: none"> <li>• Assistance to the contracting authority to develop and monitor the environmental programme from planning up to 1 year after the handover of the building</li> <li>• Environmental programme prioritising energy efficiency, maintenance and durability of the structures</li> <li>• Green construction site charter limiting sources of nuisance (biodegradable oil, prefabricated elements, recycling of site waste, etc.)</li> </ul>
<b>Combating of climate change and promotion of the region's ecological transition</b>	<ul style="list-style-type: none"> <li>• Energy ambition surpassing the regulatory requirements, amounting to a 20%/RT 2012 reduction in consumption Limiting coolant consumption</li> <li>• Performance of a LCA (Life Cycle Analysis) for the project and its carbon impact The level achieved at PRO stage is E2C1. Internal wood carpentry.</li> <li>• Plant presence with a green roof used for effectively combating heat islands.</li> <li>• The project is served by public transport. A covered bike shelter is created with 18 parking spaces.</li> </ul>
<b>Contribution to sustainable regional planning and improvement to the quality of life</b>	<ul style="list-style-type: none"> <li>• Regional rebalancing of the research and education offer</li> <li>• Reduction of the region's paving with a open, undeveloped space</li> </ul>
<b>Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals</b>	<ul style="list-style-type: none"> <li>• Creation of professional insertion hours, in connection with the integration developers of Plaine Commune</li> <li>• Allocation of works contracts facilitating access to public procurement for SMEs-VSEs</li> </ul>
<b>Respect for fundamental rights</b>	<ul style="list-style-type: none"> <li>• Improved working conditions for students and researchers</li> </ul>
<b>Responsible regional development</b>	<ul style="list-style-type: none"> <li>• The project will enable the development of 6 CNAM laboratories, in terms of both student capacity and accommodating new equipment. It therefore strengthens the research capacities in Île-de-France and more specifically in Seine-Saint-Denis.</li> <li>• Through its education component, the project is intended to improve the qualifications of the region's communities.</li> </ul>
<b>Regional economic development</b>	<ul style="list-style-type: none"> <li>• The operation represents 52 jobs for the construction phase. The project is divided into many different lots so that local companies and even insertion companies providing jobs for the unemployed can contribute to its execution.</li> <li>• Implementation of professional integration jobs</li> </ul>
<b>Fair practices, responsible purchasing and responsible supplier relations</b>	<ul style="list-style-type: none"> <li>• Requirements on the choice of construction products (reduction in use of natural resources, CO2 emissions, etc.).</li> </ul>
<b>Promotion of a suitable consultation procedure with internal and external stakeholders</b>	<ul style="list-style-type: none"> <li>• Ongoing consultation with future users (CNAM) and the regional authority.</li> </ul>

# MATHSTIC BUILDING

**NEW PROJECT**

## Higher education and research construction project



Purpose	New building
Location	Villetaneuse (93)
Key dates	10 April 2023: Foundation stone April 2024: Acceptance of work
Total project cost	€9.1 million
Region's share (%) in the total amount of the project	76.6%
2022 financing of the project through the green and sustainable bond	€0.1 million

### ► QUALITATIVE PRESENTATION OF THE PROJECT

- The construction of a building for the MATHSTIC laboratories is being carried out by the University of Paris 13 on the Villetaneuse campus (93) in order to create a research centre in the fields of mathematics, science and information and communication technology in the north of the Île-de-France region. This involves the grouping of the 3 laboratories LAGA, LIPN and L2TI. It is a flagship project in the development of the university's digital strategy in order to foster mixed research and innovation.
- The jury in charge of selecting the project manager for phase 1 of the project met in November 2019 and selected the VIB Architecture as project manager for the performance of the studies and the oversight of this operation.
- The project owner opted for an ambitious environmental approach with the "Bâtiments Durables Franciliens" initiative (Sustainable Île-

de-France Buildings), which offers 4 levels of performance rewarded with medals. For the project, the goal was to reach the Silver level. The "Design" commission made it possible to achieve this level, and the level must be confirmed during the Operation phase.

- The region has also set ambitious environmental goals as part of its "Sustainable Design and Construction" regional guide, which is mandatory for the real estate projects that it finances or executes in the academic field. To date, 28 objectives are applicable to the project, with 8 achieved at the "minimum" level, 10 at the "demanding" level and 7 at the "exemplary" level. That amounts to 25 out of 28 objectives achieved.

### ► PROJECT LIFECYCLE

- At this stage: Week of 10 April 2023: Foundation stone
- Forthcoming: Acceptance of work on 15 April 2024

### ► IMPACT INDICATORS

Indicator	Impact	Methodological note
FTE supported by the project	66	A-1
Number of project beneficiaries	414	D-8
CO2 emissions avoided by the project	13,51 t <sub>eq</sub> CO <sub>2</sub> /year	E-4





► REGIONAL ELIGIBILITY CRITERIA

<p><b>CATEGORY ELIGIBILITY CRITERIA :</b>          &gt; Construction of buildings according to a sustainable development approach, contributing to respect for the environment          &gt; All higher education buildings starting from 2017: energy consumption level required &lt; -20% compared to RT 2012 (equivalent level E3C1 of the E+C- label).</p>	<ul style="list-style-type: none"> <li>• PEC =58.7 kWh/m<sup>2</sup>/year, i.e. a 27.7% gain compared to the maximum PEC (PEC RT2012 - 27.7%)</li> <li>• CO2 emissions avoided by the project: 13.51 teq CO2/year</li> <li>• Environmental programme prioritising energy efficiency, maintenance and durability of engineered structures.</li> <li>• Green site charter limiting nuisances.</li> <li>• Ambition in the energy field beyond the regulatory requirements, which is a 30% reduction in consumption.</li> </ul>
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► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

<p><b>Environmental management and eco-design of projects</b></p>	<ul style="list-style-type: none"> <li>• Assistance to the contracting authority to develop and monitor the environmental programme from planning up to 1 year after the handover of the building</li> <li>• Competent project management in a sustainable environment</li> <li>• Environmental programme prioritising a passive approach to meet needs naturally</li> <li>• Commitment to a "Île-de-France Sustainable Building" approach and achievement of the Silver standard at the design stage</li> </ul>
<p><b>Combating of climate change and promotion of the region's ecological transition</b></p>	<ul style="list-style-type: none"> <li>• Thermal optimisation systems through bioclimatic design: cylindrical-shaped building, insulation with high-performance products, integrated sun protection in the façade, low-carbon wood and concrete structures.</li> <li>• Suitable ventilation with flow rate above regulatory level Materials in contact with indoor air class A+ Natural ventilation to remove calories Adiabatic module cooling</li> <li>• Low Consumption Level example BBC E2/C1 Primary energy consumption of the project: Project PEC = PEC max RT - 25.7%</li> <li>• Limitation of the district heat island by installing an indoor green patio, which can be irrigated with collected rainwater. The building has a waste heat recovery potential for heating and DHW, which avoids heat being dissipated into the air and thus contributing to the heat island.</li> <li>• Green construction site charter limiting sources of nuisance and overall assessment at the end of the operation Circular economy: setting up a platform to recycle construction site waste</li> <li>• Landscape rainwater management The depaving factor of the plot is 54%. Excess rainwater will be channelled to the reservoirs, such as the 13 m<sup>3</sup> landscaped swale and the 58 m<sup>3</sup> underground basin.</li> </ul>
<p><b>Contribution to sustainable regional planning and improvement to the quality of life</b></p>	<ul style="list-style-type: none"> <li>• Regional rebalancing of the research and higher education offer in the field of mathematics and computer sciences</li> <li>• Option of walking through the premises and priority given to pedestrian paths</li> <li>• Preferred local supply chains for materials</li> <li>• Project very well served by 2 public transports Tram line no. 8 and the new "Tangentielle Nord" train station Planned bicycle parking spaces</li> </ul>
<p><b>Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals</b></p>	<ul style="list-style-type: none"> <li>• PRM regulations taken into account</li> <li>• Safety study conducted.</li> </ul>
<p><b>Respect for fundamental rights</b></p>	<ul style="list-style-type: none"> <li>• Improved working conditions for PhD students and researchers by offering them efficient work spaces and uniting the teams from the 3 labs</li> </ul>
<p><b>Responsible regional development</b></p>	<ul style="list-style-type: none"> <li>• 8. Implementation of professional integration jobs in the operational phase</li> </ul>
<p><b>Regional economic development</b></p>	<ul style="list-style-type: none"> <li>• 80% of the companies involved in the project are based locally (department where project is located and neighbouring departments).</li> <li>• Creation of a childcare centre and an inter-company restaurant promoting local</li> </ul>
<p><b>Fair practices, responsible purchasing and responsible supplier relations</b></p>	<ul style="list-style-type: none"> <li>• Requirements on the choice of construction products (reduction in use of natural resources, CO2 emissions, etc.).</li> <li>• Requirements on the source of materials (limitation of grey energy)</li> </ul>
<p><b>Promotion of a suitable consultation procedure with internal and external stakeholders</b></p>	<ul style="list-style-type: none"> <li>• Consultation with laboratories for program validation: Personal notebook, user awareness, eco-gestures</li> </ul>

# TECHNICAL UNIVERSITY INSTITUTE IN NEUVILLE

NEW PROJECT

## Buildings and facilities for education and leisure



Purpose	Renovation, expansion and subsequent conversion of a building
Location	Neuville (95)
Key dates	Second quarter 2023: End of design studies and site clearance September 2023: Start of construction
Total project cost	25.2 million
Region's share (%) in the total amount of the project	77,4 %
2022 financing of the project through the green and sustainable bond	€0.9 million

### ► QUALITATIVE PRESENTATION OF THE PROJECT

- The project is being developed on an existing "business incubator" building, owned by the Val-d'Oise Departmental Council, which will be renovated, and on a free land owned by the agglomeration community of Cergy-Pontoise, where a new building will be constructed.
- The architecture agency Atelier Zündel Cristea was appointed on 3 July 2020 to provide project management for this operation.
- The project is part of a sustainable, environmental initiative. It commits to complying with the environmental requirements set by the programme: E+C- label (E3C1 level) and above all compliance with the "Sustainable Design and Construction" regional guide which is mandatory for real estate projects financed by the region in the academic field. Following studies conducted in the Detailed Design, out of 27 criteria applicable to the project, 10 were achieved at the "minimum" level, 12 at the "demanding" level and 5 at the "exemplary" level.
- Examples of objectives achieved in the project:
  - "Compliance with the Effnergie + label (consumption 20% lower than the regulatory requirements)": 50% gain achieved for conventional consumption

- "Limiting CO2 emissions in the construction and operation phases": the project reaches the C1 level of the E+C- experimental label.

- The future building will accommodate the university site of the IUT de Neuville, which will become the "experimental sciences and engineering" centre of the future international building complex structured around the sciences and techniques departments of the UCP and the IUT, MIR and IEA technological training courses.

### ► PROJECT LIFECYCLE

- At this stage:
  - Last steering committee: 11/04/2023
  - Detailed Design phase: the region issues reservations on the current heating solution (100% gas). However, compliance with the sustainable design and construction regional guide resulted in a reduction in vehicle parking.
- Forthcoming: re-evaluation of the heating solution, including geothermal energy in the scenario

### ► IMPACT INDICATORS

Indicator	Impact	Methodological note
FTE supported by the projec	90	A-1
Number of project beneficiaries	1,490	D-8
CO2 emissions avoided by the project	48,36 teq CO <sub>2</sub> /year	E-4



## ► REGIONAL ELIGIBILITY CRITERIA

<b>CATEGORY ELIGIBILITY CRITERIA :</b> > Renovation of buildings according to a sustainable development approach, contributing to respect for the environment > The works must lead to a reduction in primary energy consumption (PEC) of at least 30% (Project PEC ≤ initial PEC - 30%; i.e. the level required by the Global Thermal Regulations).	<ul style="list-style-type: none"> <li>• Environmental programme prioritising energy efficiency, maintenance and durability of the structures</li> <li>• Energy ambition surpassing the regulatory requirements, amounting to a 30% reduction in consumption (project PEC = project PEC - 30%).</li> </ul>
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## ► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

<b>Environmental management and eco-design of projects</b>	<ul style="list-style-type: none"> <li>• Project monitoring using sustainable tools: definition, updating and validation of the “Sustainable Design and Construction” regional guide dashboard at each phase of the project</li> <li>• Natural night ventilation and lack of air conditioning, high plant presence, alternative rainwater management via swales and a retention basin Recovery for watering green spaces</li> </ul>
<b>Combating of climate change and promotion of the region’s ecological transition</b>	<ul style="list-style-type: none"> <li>• Compliance with the E3C1 level of the E+C- label.</li> <li>• Compliance with the Effnergie + label (consumption 20% lower than the regulatory requirements) achieved</li> <li>• Primary energy consumption of the project: Project Pec = PEC max RT - 64.58%</li> </ul>
<b>Contribution to sustainable regional planning and improvement to the quality of life</b>	<ul style="list-style-type: none"> <li>• Implementation of plans and actions aimed at preserving biodiversity: extensive green roofing (soil thickness &gt; 10 cm), plant space developed on 30% of the plot, conservation of all healthy trees on the site</li> <li>• Sustainable rainwater management has been implemented, treating it outside and promoting natural infiltration. A water retention basin with a minimum retention volume of 118 m<sup>3</sup> is included into the project.</li> <li>• Four parking spaces are reserved for electric vehicles, with charging points. A covered and secure bike shelter is created.</li> </ul>
<b>Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals</b>	<ul style="list-style-type: none"> <li>• Creation of professional training hours (5% of hours created minimum)</li> <li>• Allocation of works contracts facilitating access to public procurement for SMEs-VSEs</li> <li>• Accessibility for all persons with disabilities.</li> </ul>
<b>Respect for fundamental rights</b>	<ul style="list-style-type: none"> <li>• Open site that local residents can pass through, including shared spaces The use of the site is shared with the local communities.</li> <li>• As the project does not include accommodation, a partnership is established with the CROUS residence in Neuville University to offer more housing options to students.</li> </ul>
<b>Responsible regional development</b>	<ul style="list-style-type: none"> <li>• The project is intended to improve the qualifications of the region’s communities in a deficient sector in the field of higher education. It incorporates spaces accessible to people outside the university (craftsmen, etc.); the site is open and local residents can pass through it, especially with a “Fab Lab” space.</li> </ul>
<b>Regional economic development</b>	<ul style="list-style-type: none"> <li>• The operation represents 90 jobs for the construction phase.</li> </ul>
<b>Fair practices, responsible purchasing and responsible supplier relations</b>	<ul style="list-style-type: none"> <li>• The materials are selected according to their service life and environmental impact (the products will be labelled A as a minimum, the adhesives will be classified as EMICODE EC1, the wood will be labelled FSC or PEFC, etc.).</li> </ul>
<b>Promotion of a suitable consultation procedure with internal and external stakeholders</b>	<ul style="list-style-type: none"> <li>• Future users as well as local residents are frequently consulted, in particular for determining the operating function of the “Fab Lab”.</li> <li>• As the site is open and members of the surrounding community can walk through it, the different parties were consulted in order to establish the site’s shared uses.</li> </ul>





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## CLEAN TRANSPORTATION

Development of the public transport supply as an alternative to using the automobile, contributing to sustainable mobility and to the fight against climate change, and projects to improve the comfort, accessibility and safety of public transport users and of people living nearby the infrastructures

- **As the leading partner of transport policies in Ile-de-France**, Region Ile-de-France participates in defining the transport organisation schemes with Ile-de-France Mobilités. The latter is the authority responsible for the organisation of public transportation in Ile-de-France, which co-finances large investment projects with its partners (such as State and General Councils).

- **The extension of the subway lines 4** (Bagneux), 11 (Rosny-Bois-Perrier) and 14 (Saint-Ouen), financed by the green and sustainability bonds, is part of the network Greater Paris Express project.

- **The extension of the line EOLE**, which prolongates RER E to the west of Ile-de-France, is another emblematic, major project. It provides for a new east-west connection for the region, passing through La Défense and Saint-Lazare train station in Paris.

- **The development and/or improvement of buses** on own sites, also financed by the green and sustainability bonds, make a substantial contribution to the desaturation of roads.

- **Region's jurisdiction: mandatory.**
- **Form of intervention: subsidies to the contracting authorities** (Ile-de-France Mobilités, RATP, SNCF, General Councils).
- **Target: all of the Ile-de-France inhabitants.**



# SUBWAY LINE 4



## Subways

Purpose	Extension to Bagneux (phase 2)
Location	Montrouge and Bagneux
Key dates	Start of civil engineering work: July 8, 2015; Commissioned on January 13, 2022
Total project cost	€ 307.1 million (phase 2)
Region's share (%) in the total amount of the project	60,0%
2022 financing of the project through the green and sustainable bond	€ 16.6 million
History of the financing of the project by previous green and responsible loans of the Region	



### ► QUALITATIVE PRESENTATION OF THE PROJECT

- The extension of line 4 to Bagneux is a major issue for the mobility of Ile-de-France inhabitants to the south of Paris: it involves the second busiest Paris metro line in terms of ridership, used daily by 674,000 passengers, with 27 stations and a length of 10.6 km. It connects with all the other metro and RER [suburban train] lines (except 3bis and 7bis).
- Project that is part of an overall vision for development of the territories served by allowing the modal shift, the opening up of the territories and better access to mobility.
- Eco-design of the project when choosing the construction materials and techniques, and construction of new metro stations with a particular emphasis on energy management and savings (low consumption, recovery, renewables), the management and consumption of drinking water and the recovery of seepage water.

- Project falls within the State-Region Plan Contract (CPER).
- Partners involved: the contracting authority (RATP) and the other financing partners, (State and the Department of Hauts-de-Seine).

### ► PROJECT LIFECYCLE

- Various finishing works underway in the tunnel, stations, and train breakdown center.
- Phase of lifting of reserves and temporary handover of equipment in the various spaces in progress.
- Work to restore surface construction rights of way in progress.

### ► IMPACT INDICATORS

Indicator	Impact	Methodological note
FTEs supported by the project	2,180 FTEs	A-2
Number of project beneficiaries	755 800	D-4
CO2 avoided by the project	570 teq CO <sub>2</sub> /year	E-3



► REGIONAL ELIGIBILITY CRITERIA

<b>Construction of rail transit infrastructure</b>	<ul style="list-style-type: none"> <li>• Construction of rail transport infrastructure meeting the following criterion: trackside electrified infrastructure and associated subsystems: infrastructure, energy, on-board control-command and signalling and trackside control-command and signalling subsystems.</li> <li>• Metro L4 Phase 2: extension of metro line 4 to Bagneux.</li> <li>• Electrified infrastructure on the ground.</li> </ul>
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► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

<b>Environmental management and eco-design of projects</b>	<ul style="list-style-type: none"> <li>• Preference for sustainable equipment and materials and for low energy consumption systems or that optimizes them: low consumption technologies, rainwater recovery.</li> <li>• Objective of using devices that can support subsequent adjustments.</li> <li>• Provisions that limit waste production during the work phase and optimize their management for reuse and recycling: The contractors working on the site will follow the specifications establishing the rules for the collection, storage, recycling, and disposal of construction waste. They will raise their staff's awareness concerning proper waste management and the cleanliness of the site and its surroundings.</li> </ul>
<b>Combating climate change and promoting the Region's environmental transition</b>	<ul style="list-style-type: none"> <li>• An expected carryover from users of private cars to the subway, of about 4.5 million fewer vehicle-kilometres.</li> <li>• Project that will reduce the costs related to the effects of pollution and the greenhouse gases of about 570 CO<sub>2</sub>teq/year (CO<sub>2</sub> ton equivalents).</li> <li>• Use of electrical energy for the project that will not contribute to air pollution and the greenhouse gases effect.</li> </ul>
<b>Sustainable regional planning and improving quality of life</b>	<ul style="list-style-type: none"> <li>• 81,800 trips will be made on the extension of line 4 to the South of Paris (including 37,600 in phase 1), representing 22 million annual trips (10 million in phase 1).</li> <li>• 41,400 inhabitants and jobs less than 600 meters from the future extension, of which 85% weren't previously served by any heavy mode of transit.</li> <li>• The current users of public transportation will gain 10 minutes on average, and the carry-over for cars will be 5 minutes.</li> <li>• The ridership will be made up of:             <ul style="list-style-type: none"> <li>• 89 % of riders who previously used public transit,</li> <li>• 6 % of riders who previously used private cars (modal carryover),</li> <li>• 5 % of new trips or riders previously making their trip on foot (induced ridership).</li> </ul> </li> </ul>
<b>Socially-inclusive development, combating of inequality and promotion of the safety of individuals</b>	<ul style="list-style-type: none"> <li>• Accessibility of stations for persons with reduced mobility (PRM) from the roadways to the platforms by widened motorized passages or equivalent equipment as the future New Validation Passage (NPV) 90; elevators serving the roadway level, the platform level and, where appropriate, an intermediate level called "mezzanine".</li> <li>• The project is in line with the fare structure in force for Ile-de-France, which is fixed by Ile-de-France Mobilités and which incorporates social fares financed by the Region to ensure access to mobility and public transport for the neediest.</li> </ul>
<b>Respect for fundamental rights</b>	<ul style="list-style-type: none"> <li>• Respect for fundamental rights of workers who worked on the construction site by addressing their safety and complying with health protection laws and regulations.</li> </ul>
<b>Responsible regional development</b>	<ul style="list-style-type: none"> <li>• The municipality of Bagneux wishes to implement a high-quality urban planning project throughout the site to rehabilitate the entrance to the city, reinvigorate the economic and commercial functions and meet the needs of the inhabitants for equipment, housing, and improvements to the living environment. The extension of line 4 to Bagneux (at the location called "the Subway Island") will also strongly reinforce the site's attractiveness.</li> </ul>
<b>Regional economic development</b>	<ul style="list-style-type: none"> <li>• Based on current estimates, the project is expected to create 2,180.4 FTEs on the worksite for phase 2 of the extension of line 4.</li> </ul>
<b>Fair practices, responsible purchasing and responsible supplier relations</b>	<ul style="list-style-type: none"> <li>• Subsidies from the Region granted to the contracting authorities that are themselves subject to the Public Procurement Code (Approval in financing agreement - Law No. 85-704 of 12 July 1985 as amended on the public contracting authority and its relationship with the private prime contractor).</li> </ul>
<b>Consultation with stakeholders</b>	<ul style="list-style-type: none"> <li>• Prior consultation held in June/July 2001; public survey from 9 January to 10 February 2012.</li> <li>• Establishment of information tools for neighbouring residents, shopkeepers and to monitor the work: brochures and information flyers, dedicated website.</li> </ul>



Proof of eligibility for TSC and DNSH available on the Region's website



Lien site internet dédié : <http://www.prolongement-m4.fr/>

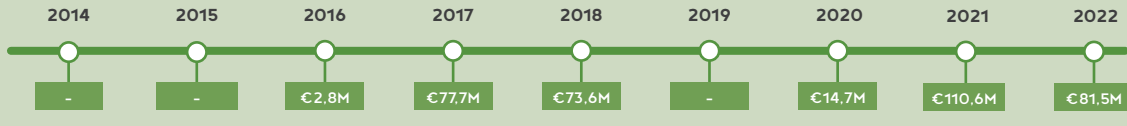
# SUBWAY LINE 11



## Subways

Purpose	Extension to Rosny-Bois-Perrier
Location	Paris, Les Lilas, Romainville, Noisy-le-Sec, Rosny-sous-Bois
Key dates	Start of preparatory work: 2016; Provisional commissioning: end of 2023
Total project cost	€ 1,298.0 million
Region's share (%) in the total amount of the project	42,9 %
2022 financing of the project through the green and sustainable bond	€ 81.5 million

History of the financing of the project by previous green and responsible loans of the Region



### ► QUALITATIVE PRESENTATION OF THE PROJECT

- The eastern extension of the metro line 11 includes the completion of 6 km of railways and the creation of 6 stations through to the station of Rosny-Bois-Perrier.
- The number of users switching from private cars to the line 11 is estimated at around 7%, or 1.33 million fewer private car journeys per year. The project will thus help to relieve road congestion and reduce pollution caused by private car transport.
- The project is part of a global vision of the development of the territories served and allows users to choose a more environmentally friendly mode of public transport.
- Partners involved: joint owners (RATP and Ile-de-France Mobilités) and other funders (State, Société du Grand Paris, City of Paris and Department of Seine-Saint-Denis).

### ► PROJECT LIFECYCLE

- Several projects are underway between Châtelet and Rosny-Bois-Perrier, both on the adaptation of existing stations and on that of extension works.
- RATP has officially communicated on a target for commissioning the extension of line 11 by 2023.
- On July 16, 2021, the SOFIA tunnel boring machine arrived at its terminus, Serge Gainsbourg in Les Lilas, and completed its last drilling for the extension of line 11.

### ► IMPACT INDICATORS

Indicator	Impact	Methodological note
FTEs supported by the project	9,216 FTEs	A-2
Number of project beneficiaries	331 000	D-4
CO2 avoided by the project	3,255 teq CO <sub>2</sub> /year	E-3





## ► REGIONAL ELIGIBILITY CRITERIA

<b>Construction of rail transit infrastructure</b>	<ul style="list-style-type: none"> <li>• Construction of rail transport infrastructure meeting the following criterion: trackside electrified infrastructure and associated subsystems: infrastructure, energy, on-board control-command and signalling and trackside control-command and signalling subsystems.</li> <li>• Extension of metro line 11 to Rosny-Bois-Perrier.</li> <li>• Electrified infrastructure on the ground.</li> </ul>
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## ► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

<b>Environmental management and eco-design of projects</b>	<ul style="list-style-type: none"> <li>• RATP, the project owner, is involved in its sustainable development policy by managing the environmental risks of its industrial sites (e.g. on the future site of maintenance and storage: treatment of polluted land) and the infrastructure it operates, through the eco-design of the infrastructure, systems, and equipment, which it specifies or designs, and through the purchases it makes.</li> </ul>
<b>Combating climate change and promoting the Region's environmental transition</b>	<ul style="list-style-type: none"> <li>• The number of users switching transport modes from private cars to the line 11 is estimated at around 7%, or 1.33 million fewer private car journeys per year. The project will thus help to relieve road congestion.</li> </ul>
<b>Contribution to sustainable regional planning and improvement to the quality of life</b>	<ul style="list-style-type: none"> <li>• General average time saved for current transit users estimated at 10 minutes per trip, representing a total time savings of 3.6 million hours per year.</li> <li>• In total, considering the time saved by other users and that due to the better station accessibility, the annual time savings amount to 4 million hours per year.</li> </ul>
<b>Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals</b>	<ul style="list-style-type: none"> <li>• New stations accessible to people with disabilities: the paths in the station between the roads and the platforms will be accessible by elevators for the main access route. The platforms will always be in aligned for easy access to the trains.</li> <li>• Integration of the project with the pricing in force in Île-de-France, set by Ile-de-France Mobilités and involving a social rate financed by the Region to guarantee the poorest have access to mobility and public transport.</li> </ul>
<b>Respect for fundamental rights</b>	<ul style="list-style-type: none"> <li>• Respect for the fundamental rights of workers who work on the site, by ensuring their safety and by respecting the legislation for the health protection.</li> </ul>
<b>Responsible regional development</b>	<ul style="list-style-type: none"> <li>• The project will serve 68,000 inhabitants and 14,500 jobs.</li> <li>• The project supports several development sectors (ZAC Boissière-Acacia in Montreuil, ZAC Centre-Ville in Lilas, ANRU sectors).</li> <li>• Communities and developers are involved throughout the project's development and implementation to ensure its consistency and relevance in terms of economic development and the areas to be served in priority.</li> </ul>
<b>Regional economic development</b>	<ul style="list-style-type: none"> <li>• Estimated creation of 9,216 FTEs on-site.</li> <li>• Around the metro stations, the new services represent an opportunity for businesses and economic activities.</li> <li>• The project will make it easier to access jobs in the sector and, for the residents near the stations, access to jobs and places of study in Ile-de-France.</li> </ul>
<b>Fair practices, responsible purchasing and responsible supplier relations</b>	<ul style="list-style-type: none"> <li>• Within the framework of the projects supported by the Region, the grants awarded to the contracting authorities (the RATP for this project) are subject to the Public Procurement Code.</li> </ul>
<b>Consultation with stakeholders</b>	<ul style="list-style-type: none"> <li>• Regular information given to residents on the evolution of the stages of the site.</li> <li>• Specific information campaigns will also be put in place among elected representatives, associations, residents near the building site and passengers of the metro and bus networks.</li> <li>• Local agents accompany the construction site on the field, liaising between residents, elected representatives and construction companies (office hours in a dedicated space, "site info" phone number).</li> </ul>



Proof of eligibility for TSC and DNSH available on the Region's website



Dedicated website: <http://prolongementligne11est.fr/>



# SUBWAY LINE 14

## Subways



<b>Purpose</b>	Extension to Mairie de Saint-Ouen
<b>Location</b>	Paris, Clichy, Saint-Ouen-sur-Seine
<b>Key dates</b>	Start of work: July 2013; Partial commissioning: 14/12/2020 Full commissioning: 28/01/2021
<b>Total project cost</b>	€ 1380.0 million
<b>Region's share (%) in the total amount of the project</b>	13.6 %
<b>2022 financing of the project through the green and sustainable bond</b>	€ 2.7 million
<b>History of the financing of the project by previous green and responsible loans of the Region</b>	



### ► QUALITATIVE PRESENTATION OF THE PROJECT

- First link in the Grand Paris Express network.
- Project integrated into a global vision of the development of the territories served.
- Objective of desaturating line 13: traffic studies have shown that the discharge rate of line 13 thanks to the extension of line 14 is more than 23% on the common trunk and more than 19% on the branches, thus improving the travel conditions of public transport users.
- The completion of the Line 14 extension project will result in a transfer of 33,686,400 vehicle.km/year of car or motorized two-wheeler users to public transport. This postponement will make it possible to reduce the GHG production induced by transport by private vehicle.
- Partners involved: joint project owners (RATP and Île-de-France Mobilités) and other funders (State, Société du Grand Paris, City of Paris and Hauts-de-Seine and Seine-Saint-Denis departments)

- The project was commissioned on 14/12/2020, except for the Porte de Clichy station, and the overall commissioning was carried out on 28/01/2021.
- It was then the first section of the Grand Paris Express to enter service, foreshadowing the radial axis crossing Paris and eventually linking Saint-Denis Pleyel to Orly airport.
- Even if it was still marked by the health crisis, a satisfaction survey carried out at the end of 2021 showed a significant discharge effect and at the top of the objectives for the busiest sectors of the line 13.
- In addition, users who now use the extended line 14 benefit fully from the time and comfort savings provided by this new link, which contributes to the attractiveness of public transit in Île-de-France.

### ► PROJECT LIFECYCLE

### ► IMPACT INDICATORS

Indicator	Impact	Methodological note
FTEs supported by the project	9,798 FTEs	A-2
Number of project beneficiaries	176,000	D-4
CO2 avoided by the project	7,310 t <sub>eq</sub> CO <sub>2</sub> /year	E-3



► REGIONAL ELIGIBILITY CRITERIA

<b>CATEGORY ELIGIBILITY CRITERIA : Construction of rail transit infrastructure</b>	<ul style="list-style-type: none"> <li>• Construction of rail transport infrastructure meeting the following criterion: trackside electrified infrastructure and associated subsystems: infrastructure, energy, on-board control-command and signalling and trackside control-command and signalling subsystems.</li> <li>• Extension line 14 of the metro to Mairie de Saint-Ouen.</li> <li>• Electrified infrastructure on the ground.</li> </ul>
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► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

<b>Environmental management and eco-design of projects</b>	<ul style="list-style-type: none"> <li>• RATP has engaged a sustainable development policy around commitment n°4 "exemplarity of its professional practices" through the management of environmental risks at its industrial sites (e.g. on the future maintenance and storage site): treatment of polluted land (asbestos, hydrocarbons, etc.) and the infrastructure it operates, through the eco-design of infrastructure, systems, equipment, which it specifies or designs, by the purchases it makes.</li> <li>• Since 2001, RATP has been committed to continuous progress by controlling and anticipating all aspects that fall within its responsibilities in terms of resource use or impacts on the natural environment and residents. This initiative resulted in the ISO 14001 certification of several metro lines (e.g. 1, 8, 14) and various maintenance workshops.</li> </ul>
<b>Combating climate change and promoting the Region's environmental transition</b>	<ul style="list-style-type: none"> <li>• Modal shift expected from users of cars or motorized two-wheelers to public transport of véh.km/year 33,686,400, which will be evaluated in the medium term, after the health crisis.</li> <li>• Expected reduction in greenhouse gas emissions of 7,310 t éq.CO2/year.</li> </ul>
<b>Sustainable regional planning and improvement to the quality of life</b>	<ul style="list-style-type: none"> <li>• Overall average time savings for current public transit users estimated at 6 minutes per trip thanks to the extension of line 14, which for a total of 162,000 trips per day corresponds to a total time saving of 4.7 million hours per year.</li> <li>• The time savings of current car users who will now use line 14 are considered equal to half the gain of former public transit users, or 3 minutes per trip.</li> <li>• Improvement of the comfort of users of line 13, the project allowing an estimated discharge rate of line 13 greater than 23% on the common trunk and more than 19% on the branches (according to traffic studies).</li> </ul>
<b>Socially-inclusive development, combating of inequality and promotion of the safety of individuals</b>	<ul style="list-style-type: none"> <li>• New stations accessible to People with Reduced Mobility (PRM): paths in the station between the road and platforms accessible by elevators for the main access route; The platforms are in straight alignment to allow level access to trains.</li> <li>• Integration of the project into the pricing system in force in Île-de-France, set by Île-de-France Mobilités and which includes social pricing financed by the Region to guarantee the poorest people access to mobility and public transport.</li> </ul>
<b>Respect for fundamental rights</b>	<ul style="list-style-type: none"> <li>• Respect for the fundamental rights of the workers who have worked on the site, in particular by ensuring their safety and respecting the legislation for the protection of health.</li> </ul>
<b>Responsible regional development</b>	<ul style="list-style-type: none"> <li>• Positive economic impact by facilitating access to jobs in the sector and for residents living near the stations to facilitate access to jobs and study sites on Île-de-France: the project will ultimately serve 96,100 inhabitants and 72,000 jobs.</li> <li>• Project that supports the development of developing sectors (ZAC des Docks, ZAC Victor Hugo, etc. in Saint-Ouen; ZAC Morel-Sanzillon, etc. in Clichy; Batignolles sector, ZAC Clichy-Batignolles, etc. in Paris).</li> </ul>
<b>Regional economic development</b>	<ul style="list-style-type: none"> <li>• Estimated creation of 9,798 FTEs on site.</li> </ul>
<b>Fair practices, responsible purchasing and responsible supplier relations</b>	<ul style="list-style-type: none"> <li>• Subsidies from the Region granted to project owners themselves subject to the Public Procurement Code (Visa in financing agreement - Law No. 85-704 amended of 12 July 1985 on public project management and its relationship with private project management).</li> </ul>
<b>Consultation with stakeholders</b>	<ul style="list-style-type: none"> <li>• Public inquiry from January to February 2012, and DUP in October 2012.</li> <li>• Regular information for local residents implementation on the progress of the stages of the work, holding of public information meetings, signage, and targeted newsletters.</li> <li>• Proximity agents to make the link between residents, elected officials and construction companies, with permanence in a dedicated room located near the site provided by the proximity agent. He was also reachable on a telephone number "site info".</li> <li>• A specific Internet portal has been set up.</li> <li>• Communities and developers involved throughout the development and implementation of the metro project within the framework of specific meetings (technical committee, monitoring committees, etc.).</li> </ul>



Proof of eligibility for TSC and DNSH available on the Region's website



Dedicated website: <https://www.ratp.fr/plans-lignes/metro/14>

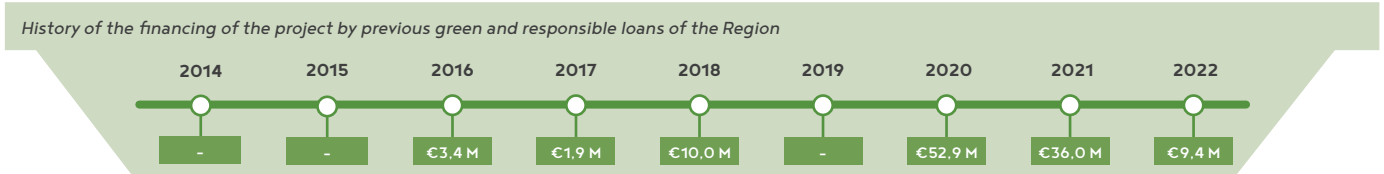


# TRAMWAY T9

## Tramway



Purpose	New line between Paris and Orly city
Location	Paris, Ivry-sur-Seine, Vitry-sur-Seine, Choisy-le-Roi, Thiais, Orly
Key dates	Start of works: 2016; Commissioning: April 2021
Total project cost	€ 403,3 million
Region's share (%) in the total amount of the project	53,3%
2022 financing of the project through the green and sustainable bond	€ 9,4 million



### ► QUALITATIVE PRESENTATION OF THE PROJECT

- Tram T9 connects Porte de Choisy in Paris to Orly city centre in 30 minutes. Its 19 stations serve 6 municipalities: Paris 13th, Ivry-sur-Seine, Vitry-sur-Seine, Choisy-le-Roi, Thiais and Orly city.
- The project will make journey easier for the 140.000 inhabitants and 65.000 jobs located on either side of the tramway line.
- The project is integrated into a global vision of the development of the territories concerned: the Val-de-Marne Department, the Seine Amont Développement Association (ASAD), the cities of Ivry-sur-Seine, Vitry-sur-Seine, Thiais, Choisy-le-Roi, Orly, the EPA ORSA, Île-de-France Mobilités and the Region have committed to the realization of an urban planning - transport charter. It should allow a good match between the tramway project and the various urban projects under way and to come. The themes studied were defined in consultation with all local stakeholders.

- Partners involved: the project owner (Île-de-France Mobilités) and the other co-financiers (State, Val-de-Marne Department, City of Paris, Grand-Orly Seine Bièvre Territorial Public Authority).

### ► PROJECT LIFECYCLE

- At the end of the preparatory work, infrastructure work started in mid-2018.
- Light Rail route T9 was opened on 10 April 2021.

### ► IMPACT INDICATORS

Indicator	Impact	Methodological note
FTEs supported by the project	2 863 FTEs	A-2
Number of project beneficiaries	70 000	D-5
CO2 avoided by the project	1 338 teq CO <sub>2</sub> /year	E-3



► REGIONAL ELIGIBILITY CRITERIA

**CATEGORY ELIGIBILITY CRITERIA :**  
**Construction of rail transit infrastructure**

- Construction of rail transport infrastructure meeting the following criterion: trackside electrified infrastructure and associated subsystems: infrastructure, energy, on-board control-command and signaling and trackside control-command and signaling subsystems.
- Tramway T9: creation of a new tramway line between the municipalities of Orly and Paris.
- Electrified infrastructure on the ground.

► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

<b>Environmental management and eco-design of projects</b>	<ul style="list-style-type: none"> <li>• The works were organized in such a way as to optimize their duration and reduce the nuisance for residents.</li> <li>• Creation of a "green ribbon" to dress up the tramway platform.</li> </ul>
<b>Combating climate change and promoting the Region's environmental transition</b>	<ul style="list-style-type: none"> <li>• Shift from passenger cars to the new tram line: an estimated 3% of tramway traffic, i.e. 6.1 million veh. km per year saved thanks to the project.</li> <li>• 1,338 teqCO2 will be saved per year because of the project.</li> </ul>
<b>Sustainable regional planning and improvement to the quality of life</b>	<ul style="list-style-type: none"> <li>• Reduction of travel time of 4 minutes and 45 seconds per passenger for former bus users, 2 min and 40 seconds for former public transport users, 1 min and 20 seconds for new public transport users (carried over from private cars and walking).</li> <li>• The project will restructure and beautify the living environment of residents, while respecting and enhancing the heritage and green characteristics of the areas crossed.</li> </ul>
<b>Socially-inclusive development, combating of inequality and promotion of the safety of individuals</b>	<ul style="list-style-type: none"> <li>• The tram stations meet safety and accessibility criteria for all categories of users (emergency call terminals, video surveillance cameras and remote signalling equipment).</li> <li>• The project is integrated with the pricing in force in Île-de-France, set by Ile-de-France Mobilités and involving a social rate financed by the Region to guarantee the poorest have access to mobility and public transport.</li> </ul>
<b>Respect for fundamental rights</b>	<ul style="list-style-type: none"> <li>• The implementation of the project respects the fundamental rights of workers who work on the site, in particular by ensuring their safety and by respecting the legislation for the health protection.</li> </ul>
<b>Responsible regional development</b>	<ul style="list-style-type: none"> <li>• The project will increase the attractiveness of the territory in a densely populated area but not adequately served by public transport until now.</li> <li>• The project will support the urban redevelopment of the territory by financing and undertaking the complete redevelopment of the public spaces served by the tramway.</li> <li>• It will meet the new travel needs generated by urban and transport projects in the sector: ZAC du Plateau in Ivry-sur-Seine, ZAC Rouget-de-Lisle and ANRU Balzac in Vitry-sur-Seine, ZAC du Port in Choisy-le-Roi, and Grands Vœux sector in Orly.</li> </ul>
<b>Regional economic development</b>	<ul style="list-style-type: none"> <li>• Based on current estimates, the project created approximately 2,863 FTEs on site.</li> <li>• Social clauses have been inserted into works contracts to promote local employment of people in difficulty.</li> </ul>
<b>Fair practices, responsible purchasing and responsible supplier relations</b>	<ul style="list-style-type: none"> <li>• In the framework of this project, the Region is allocating subsidies to project owner Ile-de-France Mobilités, who is subject to the Public Procurement Code.</li> </ul>
<b>Consultation with stakeholders</b>	<ul style="list-style-type: none"> <li>• Prior consultation was organised in October / November 2012.</li> <li>• The public inquiry was held in June / July 2014 and the Public Interest Order was issued on 2 February 2015.</li> <li>• Information tools for neighbours, residents and shopkeepers have been set up for the follow-up of the work: information brochures and a dedicated website.</li> </ul>



Proof of eligibility for TSC and DNSH available on the Region's website



Dedicated website: <https://www.iledefrance-mobilites.fr/le-reseau/services-de-mobilite/tram/mise-en-service-du-tram-9>



# TRAMWAY T10

NEW PROJECT

## Tramways



Purpose	Construction of a new tramway line between Antony and Châtenay-Malabry
Location	Antony, Châtenay-Malabry, le Plessis-Robinson, Clamart
Key dates	2016: declaration of public utility. 2017-2020: preparatory work and diversion of networks. 2019-2022: tramway works. 2023: end of testing. Provisional commissioning mid-2023
Total project cost	€351 million
Region's share (%) in the total amount of the project	49 %
2022 financing of the project through the green and sustainable bond	€49,6 million

### ► QUALITATIVE PRESENTATION OF THE PROJECT

- The T10 creates a new tramway-type link between Antony and Clamart. This new line, 6.8 km long, has 13 stations.
- The T10 facilitates the daily mobility of some 175,000 inhabitants and 65,000 employees in the four municipalities served.
- The T10 provides connections with the RER B, the T6 tram, the Trans-Val-de-Marne bus (TVM). Stations and intersections are designed to ensure that the transition from one mode of transport to another is quick and safe.
- Partners involved: the project owners (Île-de-France Mobilités and the Hauts-de-Seine departmental council) and the other co-financiers (State).

### ► PROJECT LIFECYCLE

- The commissioning of the line between the stations: Croix de Berry (Antony) and the Jardin Parisien (Clamart) is expected before the end of 2023.
- Work is being completed and blank running tests began at the end of 2022.

### ► IMPACT INDICATORS

Indicator	Impact	Methodological note
Number of project beneficiaries	170 000	D-5
CO2 emissions avoided by the project	31 237 teq CO <sub>2</sub> /year	E-3



► REGIONAL ELIGIBILITY CRITERIA

**CATEGORY ELIGIBILITY CRITERIA :**  
**Construction of rail transit infrastructure**

- Construction of rail transport infrastructure meeting the following criterion: trackside electrified infrastructure and associated subsystems: infrastructure, energy, on-board control-command and signalling and trackside control-command and signalling subsystems.
  - Tramway T10: creation of a new tram line between Antony and Clamart.
  - Electrified infrastructure on the ground.

► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

<p><b>Environmental management and eco-design of projects</b></p>	<ul style="list-style-type: none"> <li>• The T10 tramway will run mainly on existing tracks to preserve the environment (natural habitats, fauna and flora).</li> <li>• An ecologist ensures an environmental follow-up of the site.</li> <li>• The T10 tramway platform is mostly vegetated, and more than 1,000 alignment trees are planted along the route.</li> </ul>
<p><b>Combating climate change and promoting the Region's environmental transition</b></p>	<ul style="list-style-type: none"> <li>• By ensuring a good connection with the RER B, the T6 tramway and the Trans-Val-de-Marne, the T10 tramway creates favourable conditions for a modal shift from the private car to the new tram line.</li> <li>• Secure bicycle hoops and parking are accessible, facilitating the TC/bike combination.</li> </ul>
<p><b>Sustainable regional planning and improvement to the quality of life</b></p>	<ul style="list-style-type: none"> <li>• To offset the inevitable impacts:                             <ul style="list-style-type: none"> <li>- Reforestation actions are planned: about 19,000 trees were planted in early 2019 in Seine-et-Marne.</li> <li>- A contribution to the Strategic Timber and Forest Fund has been paid to support forest restocking.</li> <li>- Forest restoration work is planned on about 9.5 hectares in the forest of Verrières, in order to create better habitat and reproduction conditions for animal species.</li> </ul> </li> </ul>
<p><b>Socially-inclusive development, combating of inequality and promotion of the safety of individuals</b></p>	<ul style="list-style-type: none"> <li>• The T10 tramway multiplies the travel opportunities of Ile-de-France residents, with many possible connections.</li> <li>• With its floors and low platforms, the trains are accessible to all.</li> </ul>
<p><b>Respect for fundamental rights</b></p>	<ul style="list-style-type: none"> <li>• The T10 tram meets the mobility needs of users.</li> <li>• The T10 tramway respected the fundamental rights of the workers who worked on the site by ensuring their safety and respecting the legislation in force.</li> </ul>
<p><b>Responsible regional development</b></p>	<ul style="list-style-type: none"> <li>• Thanks to its connections with other public transport lines (RER B, Tramway T6, bus), the T10 tramway will promote public transport travel for the assets of the municipalities crossed as well as for workers residing outside this territory.</li> </ul>
<p><b>Regional economic development</b></p>	<ul style="list-style-type: none"> <li>• The project will create many FTEs on site.</li> </ul>
<p><b>Fair practices, responsible purchasing and responsible supplier relations</b></p>	<ul style="list-style-type: none"> <li>• As part of this project, the Region awards grants to the project owners, Île-de-France Mobilités and the Hauts-de-Seine Departmental Council, which are subject to the Marchés Publics Cooperative.</li> </ul>
<p><b>Consultation with stakeholders</b></p>	<ul style="list-style-type: none"> <li>• The preliminary consultation was organised in 2013.</li> <li>• The public inquiry took place from October 5, 2015, to November 6, 2015. The project was declared of public utility by the Prefect of Hauts-de-Seine on October 11, 2016.</li> <li>• Information tools for residents, residents and traders have been set up to monitor the work: brochures and information brochures, dedicated website.</li> </ul>



Proof of eligibility for TSC and DNSH available on the Region's website



Dedicated website: <https://tram-t10.iledefrance-mobilites.fr/>

# TRAMWAY T12

## Tramways



<b>Purpose</b>	New line between Massy-Palaiseau and Evry Courcouronnes
<b>Location</b>	Massy, Palaiseau, Champlan, Longjumeau, Chilly-Mazarin, Epinay-sur-Orge, Savigny-sur-Orge, Morsang-sur-Orge, Viry-Châtillon, Grigny, Ris-Orangis, Courcouronnes, Evry
<b>Key dates</b>	Start of work: 2017; Provisional commercial commissioning: December 10, 2023
<b>Total project cost</b>	€ 526,0 million
<b>Region's share (%) in the total amount of the project</b>	55,8%
<b>2022 financing of the project through the green and sustainable bond</b>	€ 73,5 million

History of the financing of the project by previous green and responsible loans of the Region



### ► QUALITATIVE PRESENTATION OF THE PROJECT

- The project consists of creating a new link between the cities of Massy and Evry in the form of a tram-train. It is structured in two sections: a railway section between Massy-Palaiseau and Epinay-sur-Orge where it will replace the existing branch of the RER C over 10.1 km and an urban section passing through the creation of a new tramway over 10.6 km between Epinay-sur-Orge and Evry-Courcouronnes.
- The T12 Express project covers the north of the department of Essonne, which is affected by economic development issues and offers transfers to RER lines B, C and D.
- The project reinforces the offer of transport in a ring crossing through the south of Ile-de-France, connecting to the existing (RER, Transilien) and coming (Greater Paris) transport networks. It is integrated into a global vision of the development of the territories concerned and offers an attractive alternative to the private car.

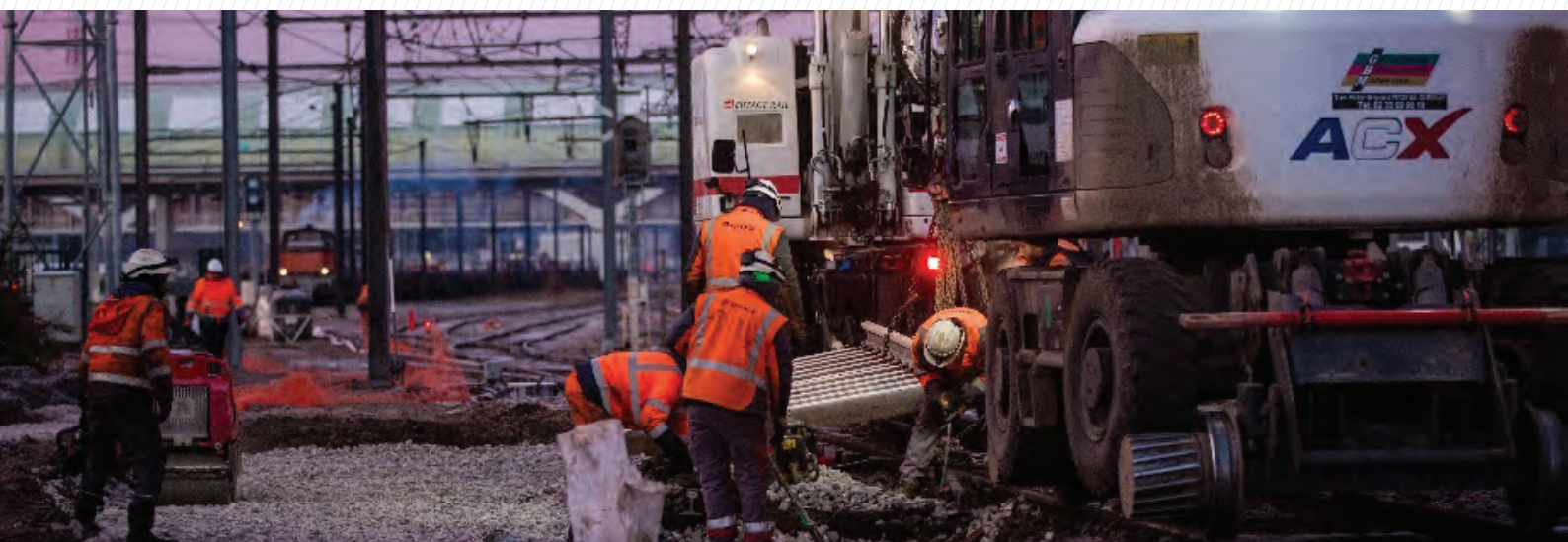
- The partners involved: the project owners (SNCF Réseau, SNCF Mobilité), Ile-de-France Mobilités and other funders (the State, Department of Essonne).

### ► PROJECT LIFECYCLE

- Work on the Massy rail track plan is underway, with a terminus station at the hub in connection with the RER B and C. The connection with the RER C will be made on the same platform.
- Construction of a retaining wall to stabilize the ground to consolidate the slope of the A6 motorway to make it compatible with the T12 tram line.

### ► IMPACT INDICATORS

Indicator	Impact	Methodological note
FTEs supported by the project	4 095 FTEs	A-2
Number of project beneficiaries	40 000	D-5
CO2 avoided by the project	2 534 teq CO <sub>2</sub> /year	E-3





## ► REGIONAL ELIGIBILITY CRITERIA

### CATEGORY ELIGIBILITY CRITERIA : Construction of rail transit infrastructure

- Construction of rail transport infrastructure meeting the following criterion: trackside electrified infrastructure and associated subsystems: infrastructure, energy, on-board control-command and signalling and trackside control-command and signalling subsystems.
- T12: creation of a new tramway line between the municipalities of Massy-Palaiseau and Evry-Courcouronnes.
- Electrified infrastructure on the ground.

## ► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

<b>Environmental management and eco-design of projects</b>	<ul style="list-style-type: none"> <li>• The SNCF, the project owner, is committed to social responsibility and aims in particular to reduce the environmental impacts of its projects.</li> <li>• Particular attention was paid to the insertion of the T12 Express garage workshop (greenery to improve the landscape quality of the site for the residents, the HQE building in a wooden structure, the green roof of the workshop and custodian facilities to improve the insulation of buildings, rainwater harvesting).</li> <li>• The facilities along the route incorporate cycling facilities ensuring the best possible continuity with existing bike routes.</li> </ul>
<b>Combating climate change and promoting the Region's environmental transition</b>	<ul style="list-style-type: none"> <li>• The project will help reduce pollution with savings estimated of around 2,534 teqCO2 per year.</li> </ul>
<b>Sustainable regional planning and improvement to the quality of life</b>	<ul style="list-style-type: none"> <li>• The new line will improve the quality of life of users in the Ile-de-France region: the average time saved for a public transport user is estimated at 6 minutes per trip.</li> </ul>
<b>Socially-inclusive development, combating of inequality and promotion of the safety of individuals</b>	<ul style="list-style-type: none"> <li>• The project helps open up districts that are located near the T12 express.</li> <li>• In terms of solidarity, the new T12 Express line will be integrated with the pricing in force in Île-de-France, set by Ile-de-France Mobilités and involving a social rate financed by the Region to guarantee the poorest have access to mobility and public transport.</li> </ul>
<b>Respect for fundamental rights</b>	<ul style="list-style-type: none"> <li>• As part of its implementation, the project respects the fundamental rights of workers who work on the site, in particular by ensuring their safety and by respecting the legislation for the health protection.</li> </ul>
<b>Responsible regional development</b>	<ul style="list-style-type: none"> <li>• The project will enhance the attractiveness of the territory in an area with great needs in terms of transport infrastructure. The project will notably link up clusters of activities, without going through Paris (Massy and Evry).</li> <li>• The T12 will encourage public transport for workers from the municipalities served (51.000 workers), of whom only 19% of those who work in this territory use this mode of transport. It will also make it possible for residents outside of this area to use public transport via a mesh network to other lines (RER B, C and D).</li> </ul>
<b>Regional economic development</b>	<ul style="list-style-type: none"> <li>• Based on current estimates, the project will create 4,095 FTEs on site.</li> </ul>
<b>Fair practices, responsible purchasing and responsible supplier relations</b>	<ul style="list-style-type: none"> <li>• In the framework of this project, the Region allocated subsidies to project owners Ile-de-France Mobilités, SNCF Voyageurs and SNCF Réseau, who are subject to the Public Procurement Code.</li> </ul>
<b>Consultation with stakeholders</b>	<ul style="list-style-type: none"> <li>• Prior consultation was organised between May and July 2009.</li> <li>• The public inquiry took place between 7 January and 11 February 2013 and the Decision on Public Utility, covering the entire project, was published on 22 August 2013.</li> <li>• Information tools for neighbours, residents and shopkeepers have been set up for the follow-up of the work: information brochures and a dedicated website.</li> </ul>



Proof of eligibility for TSC and DNSH available on the Region's website



Dedicated website: <https://tram12-express.iledefrance-mobilites.fr/>  
<https://tram12-express.iledefrance-mobilites.fr/decouvrir-le-projet/>

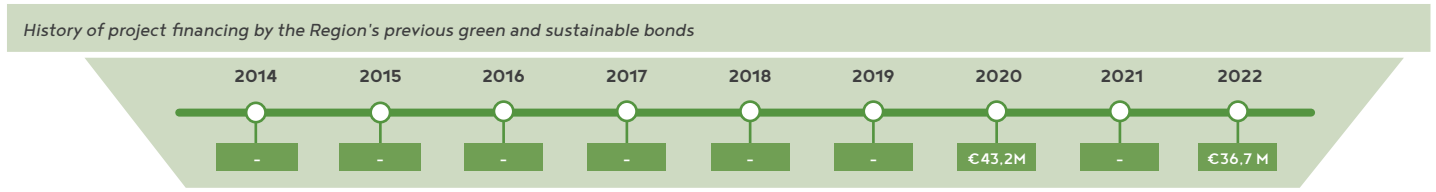


# TRAMWAY T13 EXPRESS (PHASE 1)

## Tramways



Purpose	Extension of the Great Western Belt to the north and south
Location	Saint-Cyr-l'Ecole, Versailles, Bailly, Noisy-le-Roi, l'Etang-la-Ville, Mareil-Marly, Saint-Germain-en-Laye
Key dates	Provisional commissioning: July 2022
Total project cost	€ 434,8 million
Region's share (%) in the total amount of the project	53,2 %
2022 financing of the project through the green and sustainable bond	€ 36,7 million



### ► QUALITATIVE PRESENTATION OF THE PROJECT

- Various studies were carried out from 2003 to 2005 on solutions for extending the Grande Ceinture Ouest (GCO) - in service since 2004 - to the RER A in the north (Achères, Poissy, Saint-Germain-en-Laye) and to the RER C and the Transilien N and U lines in the south (Saint-Cyr-l'Ecole, Versailles). These studies have shown a strong interest in reaching the city center of Saint-Germain-en-Laye which is a sought-after pole of activities and where the closest network with the RER A significantly reinforces the attractiveness of the link. The most realistic solution, given the current configuration of the site, is tram-train operation.
- One of the major objectives of the project is therefore to improve the network of public transport by extending the Grande Ceinture Ouest in order to ensure efficient connections with the existing railway lines: the RER A in Saint-Germain-en-Laye and Achères, the RER C and the Transilien U and N lines in Saint-Cyr-L'Ecole, and the Transilien L in Saint-Nom-la-Bretèche and Achères. The Tram 13 express, a fast by-

pass project, will facilitate travel between business hubs by avoiding transit through Paris.

- The Tram 13 express project consists, in phase 1, of linking Saint-Germain-en-Laye RER to the north, and Saint-Cyr RER to the south (T13th phase 1).
- Partners involved: the project owners (SNCF Réseau, SNCF Voyageurs, SNCF Gares & Connexions, Île-de-France Mobilités, RATP) and other funders (State, Department of Yvelines).

### ► PROJECT LIFECYCLE

- Phase 1 of the T13 between Saint-Cyr and St Germain-en-Laye was inaugurated on July 6, 2022.
- The work has been completed, with the exception of some finishing work, and the tram has been in service since the inauguration.

### ► IMPACT INDICATORS

Indicator	Impact	Methodological note
Worksite FTE supported by the project	2 178 FTEs	A-2
Number of project beneficiaries	21 000	D-5
CO2 emissions avoided by the project	1 116 teq CO <sub>2</sub> /year	E-3



► REGIONAL ELIGIBILITY CRITERIA

<b>CATEGORY ELIGIBILITY CRITERIA :</b> <b>Construction of rail transit infrastructure</b>	<ul style="list-style-type: none"> <li>• Construction of rail transport infrastructure meeting the following criterion: trackside electrified infrastructure and associated subsystems: infrastructure, energy, on-board control-command and signalling and trackside control-command and signalling subsystems.</li> <li>• T13: extension of the Great Western Belt to the north and south, connecting municipalities</li> <li>• Electrified infrastructure on the ground.</li> </ul>
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► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

<b>Environmental management and eco-design of projects</b>	<ul style="list-style-type: none"> <li>• In general, the insertion of the platform and stations is the subject of particular attention given the landscape and heritage sensitivity of the sites crossed (forest massif, castles of Versailles and Saint-Germain-en-Laye).</li> <li>• In accordance with the project's environmental policy and in line with the approach aimed at avoiding, reducing, and compensating for the impacts of the works, for each m2 of forest impacted by the construction of Tram 13 express, 4 m2 are subject to reforestation in the Saint-Germain massif. In total, forest compensation covers more than 17 ha.</li> <li>• In addition, ecological compensation operations for protected species have been carried out in the Bois de la Duchesse in Bonnelles.</li> <li>• The edge of the forest of Saint-Germain corresponds to the edge of the forest and is a strategic space, which marks the passage from the forest to the city. It plays an essential role in the preservation of biodiversity and the proper functioning of the ecosystem it shelters. Île-de-France Mobilités is working in partnership with the National Forestry Office to carry out so-called "re-flooring" work in this sector.</li> <li>• The Maintenance and Storage site for Sailors is subject to a declaration procedure under the Classified Installations for the Protection of the Environment (ICPE).</li> <li>• The facilities along the route incorporate cycling facilities that ensure continuity with existing cycle routes as much as possible.</li> </ul>
<b>Combating climate change and promoting the Region's environmental transition</b>	<ul style="list-style-type: none"> <li>• The project will reduce pollution, with estimated savings of 1,116 teqCO2 per year.</li> </ul>
<b>Sustainable regional planning and improvement to the quality of life</b>	<ul style="list-style-type: none"> <li>• T13 Phase 1 saves time for transit users and provides increased accessibility to and from the study area. For former public transport users who switch to T13, the time saved per user is estimated at 11 minutes. The monetized annual time saving amounts to €24.2 million.</li> <li>• The gains related to the modal shift from private cars to public transport are valued at €2.5 million for the first year of operation.</li> </ul>
<b>Socially-inclusive development, combating of inequality and promotion of the safety of individuals</b>	<ul style="list-style-type: none"> <li>• The project contributes to the opening of neighbourhoods that are located near the T13 Express.</li> <li>• In terms of solidarity, the new T13 Express line will be integrated into the pricing in force in Île-de-France, set by Île-de-France Mobilités and which includes social pricing financed by the Region to guarantee the poorest access to mobility and public transport.</li> </ul>
<b>Respect for fundamental rights</b>	<ul style="list-style-type: none"> <li>• As part of its implementation, the project respects the fundamental rights of workers working on the site, by ensuring their safety and respecting legislation for the protection of health.</li> </ul>
<b>Responsible regional development</b>	<ul style="list-style-type: none"> <li>• The project will strengthen the attractiveness of the territory in an area where transport infrastructure needs are important. The project will make it possible to connect poles of activity, without going through Paris.</li> <li>• The T13 will promote travel by public transport for the assets of the municipalities crossed (nearly 77,000 jobs). It will also allow workers living outside this territory to use public transport thanks to a mesh network with other lines (RER A and C, Transilien lines N, U and L).</li> </ul>
<b>Regional economic development</b>	<ul style="list-style-type: none"> <li>• Based on current estimates, the project is expected to create 2178 FTEs on site.</li> </ul>
<b>Fair practices, responsible purchasing and responsible supplier relations</b>	<ul style="list-style-type: none"> <li>• As part of this project, the Region awards subsidies to the project owners, Île-de-France Mobilités, SNCF Voyageurs, SNCF Réseau, SNCF Gares &amp; Connexions and RATP, which are subject to the Public Procurement Code.</li> </ul>
<b>Promotion of a suitable consultation procedure with internal and external stakeholders</b>	<ul style="list-style-type: none"> <li>• The preliminary consultation was held in September and October 2008.</li> <li>• The public inquiry took place from June to September 2013. The project was declared of public utility by the prefect of Yvelines on February 3, 2014.</li> <li>• Information tools for residents, residents and traders have been set up to monitor the work: brochures and information brochures, dedicated website.</li> </ul>



Proof of eligibility for TSC and DNSH available on the Region's website



Dedicated website: <http://www.tram13-express.fr/>

# EOLE

## Railway links



<b>Purpose</b>	West extension of the RER E
<b>Location</b>	Paris, Courbevoie, Nanterre, Houilles, Carrières-sur-Seine, Poissy, Villennes-sur-Seine, Les Mureaux, Aubergenville, Epône, Mézières, Mantes-la-Jolie
<b>Key dates</b>	Start of work: 2017; Commissioning up to Nanterre-La-Folie: mid-2023; Full commissioning to Mantes-La-Jolie: 2024
<b>Total project cost</b>	€ 5 509,0 million
<b>Region's share (%) in the total amount of the project</b>	28,3%
<b>2022 financing of the project through the green and sustainable bond</b>	€ 273,0 million

**History of project financing by the Region's previous green and sustainable bonds**



**► QUALITATIVE PRESENTATION OF THE PROJECT**

- RER line E west extension, from Haussmann - Saint-Lazare station to Mantes-la-Jolie station.
- The project is 55 km long, with the construction of a new underground infrastructure of about 8 km, the redevelopment of the existing line over 47 km and the creation of three new stations: Porte Maillot, La Défense and Nanterre La Folie. It also provides for new trains.
- An innovative project with a new Nexteo operating system (it will make it possible to run more trains on a single line faster) and operating in redundancy (two self-sufficient branches will operate in parallel on the central section from Nanterre-la-Folie to Rosa Parks; this will make it so that one branch is not impacted should the other branch encounter delays).
- The Eole project is committed to introducing employment clauses in its contracts that reserve 7% of the hours worked for professional integration. After one year of construction, 124,127 hours of professional work was completed in January 2018, out of the 345,898 hours corresponding to the contracts that have started.

- Involved partners and public co-financiers: the project owners (SNCF Réseau, SNCF Mobilité, Ile-de-France Mobilités) other funders (The State, Greater Paris, City of Paris, Departmental Council of Hauts-de-Seine, Departmental Council of Yvelines).

**► PROJECT LIFECYCLE**

- Further digging of the tunnel boring machine between Courbevoie and Haussmann St Lazare, start of the laying of the tracks in the tunnel.
- Continuation of work on the existing section: work on the Bezons viaduct, Mantes viaduct, 3rd lane, existing stations (Haussmann St Lazare, Magenta, Epône-Mézières and Les Mureaux, Mantes-la-Jolie).
- Continued work on the new stations (Nanterre la Folie, la Défense, Porte Maillot).

**► IMPACT INDICATORS**

Indicator	Impact	Methodological note
FTEs supported by the project	26 554 FTEs	A-2
Number of project beneficiaries	1 400 000	D-4
CO2 emissions avoided by the project	8 040 teq CO <sub>2</sub> /year	E-3





► REGIONAL ELIGIBILITY CRITERIA

<p><b>CATEGORY ELIGIBILITY CRITERIA :</b> <b>Construction of rail transit infrastructure</b></p>	<ul style="list-style-type: none"> <li>• Construction d'infrastructures de transport ferroviaire répondant au critère suivant : infrastructure électrifiée au sol and sous-systèmes associés : infrastructure, énergie, contrôle-commande and signalisation embarqués and sous-systèmes de contrôle-commande and de signalisation au sol.</li> <li>• Prolongement de la ligne du RER E entre Paris and Mantes-la-Jolie.</li> <li>• Infrastructure électrifiée au sol.</li> </ul>
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► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

<p><b>Environmental management and eco-design of projects</b></p>	<ul style="list-style-type: none"> <li>• Site eco-design logic: management of construction waste, discharge of pollutants, limitation of nuisances caused by the site (noise, pollution, vibration, lighting, transport of dangerous materials...).</li> </ul>
<p><b>Combating climate change and promoting the Region's environmental transition</b></p>	<ul style="list-style-type: none"> <li>• Report modal estimé à 67 millions de veh.km en 2020, avec une croissance annuelle de 1%.</li> <li>• Le taux de report modal net est de l'ordre de 3% des usagers du RER E, la part des trafics induits est de 2 à 4% selon la modélisation.</li> <li>• Shift in transport modes estimated at 67 million veh.km in 2020, with annual growth of 1%.</li> <li>• The net modal transfer rate is around 3% of RER E users, the share of induced traffic is 2 to 4% depending on the model.</li> <li>• Estimated savings, due to the modal shift from road to rail, of 8,040 teqCO2 per year.</li> </ul>
<p><b>Sustainable regional planning and improvement to the quality of life</b></p>	<ul style="list-style-type: none"> <li>• Decrease in the number of trains on the busiest section of the RER A between Châtelet-les-Halles and Auber of 12% during rush hour compared to a 2020 situation without extensions to the RER E.</li> <li>• Yearly time saved: on average 6 minutes, equal to 18 million hours per year.E.</li> <li>• Gain de temps annuel : en moyenne 6 minutes, soit 18 millions d'heures par an.</li> </ul>
<p><b>Socially-inclusive development, combating of inequality and promotion of the safety of individuals</b></p>	<ul style="list-style-type: none"> <li>• Promotes the opening up of the territory and is fully in line with a desire to fight against inequalities between territories.</li> <li>• Project management requires companies to entrust a minimum number of working hours to people who are far from employment, to train and support them in order to promote their access to sustainable employment and reintegrate them permanently into the job market.</li> <li>• 1,385,000 hours of professional integration between 2016 and March 2023.</li> </ul>
<p><b>Respect for fundamental rights</b></p>	<ul style="list-style-type: none"> <li>• By promoting intermodality and better service in the region, this project promotes the right to come and go.</li> </ul>
<p><b>Responsible regional development</b></p>	<ul style="list-style-type: none"> <li>• The project participates in the development and dynamization of the region, and promotes the urban rehabilitation and urban development of Seine Aval.</li> <li>• Access to jobs will be significantly improved. It may result in more than 250,000 additional jobs in less than an hour for those who reside in the east and north of Paris, in the central part of Hauts-de-Seine and in Seine Aval.</li> </ul>
<p><b>Regional economic development</b></p>	<ul style="list-style-type: none"> <li>• Création d'emplois relatives au chantier estimées à 26 554 FTEs.</li> <li>• Estimated job creation at 26,554 FTEs.</li> <li>• The project should encourage the implementation of businesses or strengthen the existing activity in the Seine valley and in Paris, in La Défense, by improving access.</li> <li>• In addition, the extension will result in the creation of jobs for transport agents.</li> </ul>
<p><b>Fair practices, responsible purchasing and responsible supplier relations</b></p>	<ul style="list-style-type: none"> <li>• Subsidies from the Region granted to the Contracting Authorities, themselves subject to the Public Procurement Code.</li> </ul>
<p><b>Consultation with stakeholders</b></p>	<ul style="list-style-type: none"> <li>• Public debate: autumn 2010.</li> <li>• Public inquiry: from 16 January to 18 February 2012 and the Decision on Public Utility published on 31 January 2013.</li> <li>• Implementation of information tools for neighbours, residents and shopkeepers have been set up for the follow-up of the work: information brochures and a dedicated website.</li> </ul>



Proof of eligibility for TSC and DNSH available on the Region's website



Dedicated website: <http://www.rer-eole.fr/>



# TZEN 4

Clean transportation / Scheme: Development for buses on own sites and layout of roadways



Purpose	New bus line between Viry-Châtillon and Corbeil-Essonnes
Location	Viry-Châtillon, Grigny, Ris-Orangis, Courcouronnes, Evry, Corbeil-Essonnes
Key dates	Work started in 2021
Total project cost	€124.0 million
Financing by the Region in the total amount of the project	49,0%
2022 financing by the green and sustainability bond	€3.8 million



### ► QUALITATIVE PRESENTATION OF THE PROJECT

- The TZEN 4 project consists in creating a public transport infrastructure on a clean site between Viry-Châtillon and Corbeil-Essonnes. It will replace the current 402 line on the section between "La Treille" at Viry-Châtillon and the RER D station at Corbeil-Essonnes, mainly by integrating the existing section. The infrastructure will extend on about 14,3 km and serve 30 stations with a frequency of 4 minutes during rush hours.
- When commissioned, the TZEN 4 will also borrow clean site sections constructed as part of the urban projects crossed (Grande Borne and ZAC Centre-Ville at Grigny and ZAC de la Montagne des Glaises at Corbeil-Essonnes).
- The TZEN 4 will also be part of the urban projects of the priority neighbourhoods identified in the New National Urban Renewal Program (NPNRU). Several districts of national or regional interest will be served directly by the TZEN 4 (Tarterêts at Corbeil-Essonnes, Pyramides at Evry, Plateau at Ris-Orangis, Grigny 2 and La Grande Borne at Grigny, Plateau at Viry-Châtillon) thus contributing to limiting their isolation from the territory and its economic dynamics. The success of the TZEN 4 project in these neighbourhoods is a priority for the Region. It has chosen to

invest specifically in the project through a framework policy, which was passed on 26 January 2017 (CR n°2017-06).

- For the TZEN 4, Île-de-France Mobilités has chosen 24-metre long buses that are fully electric and 100% accessible to people with reduced mobility. However, the purchase of the buses will be covered by Île-de-France Mobilités, while the Île-de-France Region finances the maintenance and storage site and its equipment with electric charging stations.
- Partners involved: Île-de-France Mobilités project management and other funders (State and Department of Essonne).

### ► PROJECT LIFECYCLE

- Dealer diversion work has been completed.
- Work on the platform began in January 2023 and work on the first stations began in March 2023. The work is scheduled to be completed in January 2024.
- Work on the maintenance and storage site (SMR) began in September 2021 for delivery in June 2023.
- Commissioning is scheduled for summer 2024.

### ► IMPACT INDICATORS

Indicator	Impact	Methodological note
Worksite FTE supported by the project	880 FTEs	A-2
Number of project beneficiaries	47 000	D-6



► REGIONAL ELIGIBILITY CRITERIA

<b>CATEGORY ELIGIBILITY CRITERIA : Construction of rail transit infrastructure</b>	<ul style="list-style-type: none"> <li>• Creation of a new bus line between Viry-Châtillon and Corbeil-Essonnes. On 11/10/2021, the Board of Directors of IDFM presented the choice validated in CAD: the TZEN 4 buses will be articulated vehicles of 24m, 100 % electric.</li> <li>• Infrastructure enabling low-carbon road transport.</li> </ul>
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► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

<b>Environmental management and eco-design of projects</b>	<ul style="list-style-type: none"> <li>• PConsideration for environmental issues (noise, air, water, biodiversity), e.g. restitution of impacted trees.</li> <li>• Work phase procedure to refine</li> </ul>
<b>Combating climate change and promoting the Region's environmental transition</b>	<ul style="list-style-type: none"> <li>• The project promotes the continuity of soft mobility. Thanks to its own sites, it also frees itself from the constraints of traffic congestion responsible for major irregularity issues so that it provides a real alternative to the use of the car.</li> <li>• The T Zen 4 project requires only very limited consumption of natural areas likely to house protected species. The impact study of the project concludes that there is no residual impact on the natural environment, after the implementation of avoidance and reduction measures.</li> <li>• No wetlands in the project area.</li> </ul>
<b>Sustainable regional planning and improvement to the quality of life</b>	<ul style="list-style-type: none"> <li>• The layout of the TZEN 4 crosses a dense and heterogeneous urban fabric, not only considering the typology of constructions but also with regard to their quality. The project is an opportunity to renew aging plant structures, restore a more human-scale urban language, restore fringes and enhance perspectives.</li> <li>• Setting up of comfortable public spaces, which favour the soft and pedestrian mode: pedestrian continuity, large pavements, restitution of plantations and parking.</li> </ul>
<b>Socially-inclusive development, combating of inequality and promotion of the safety of individuals</b>	<ul style="list-style-type: none"> <li>• This project promotes the opening up of the territory and fully subscribes to an effort to fight against inequalities between territories. Île-de-France Mobilités has selected 24-metre-long buses, which will have full disabled access.</li> </ul>
<b>Respect for fundamental rights</b>	<ul style="list-style-type: none"> <li>• By promoting intermodality and a better coverage of the territory, this project promotes the right to come and go.</li> </ul>
<b>Responsible regional development</b>	<ul style="list-style-type: none"> <li>• Strengthening the attractiveness of this sector promotes its economic development.</li> <li>• Upgrade the 402 line towards a more efficient mode between the "La Treille" station at Viry-Châtillon and the Corbeil-Essonnes RER station.</li> <li>• Consolidate and develop intermodality with existing (RER D, TZEN 1) and planned (Tram-Train 12 Express) transport lines.</li> </ul>
<b>Regional economic development</b>	<ul style="list-style-type: none"> <li>• The project is a catalyst for the development of the sector, by opening up poorly connected neighbourhoods and increasing the attractiveness of the served corridor, and more broadly to all municipalities concerned by the project.</li> <li>• Support for works-related jobs.</li> </ul>
<b>Fair practices, responsible purchasing and responsible supplier relations</b>	<ul style="list-style-type: none"> <li>• Subsidies from the Region granted to the actual project owners subject to the Code des Marchés Publics (public procurement code).</li> </ul>
<b>Consultation with stakeholders</b>	<ul style="list-style-type: none"> <li>• Prior consultation from 17 October 2010 to 2 December 2011, which defined the insertion according to the layout and location of the Maintenance and Storage Site (SMR).</li> <li>• Public survey from 30 May to 4 July 2016.</li> <li>• Statement of public utility on 8 December 2016.</li> <li>• Numerous exchanges with the local players as part of the project management, which made it possible to develop the project (layout, stations, SMR, etc.).</li> </ul>



**Proof of eligibility for TSC and DNSH available on the Region's website**



**Dedicated website: <https://tzen4.iledefrance-mobilites.fr/>**





# TERRESTRIAL AND AQUATIC BIODIVERSITY CONSERVATION

## Projects contributing to the preservation of biodiversity, natural habitats and landscapes and the development of green spaces.

The implemented policy is aimed at protecting natural environments and biodiversity across the Île-de-France region, and technically and financially supporting the strategies and actions contributing to the preservation, restoration and enhancement of aquatic and wetland environments.

The region will devote 400 million euros to biodiversity in the Île-de-France region over the next ten years as part of the 2020-2030 Regional Strategy for Biodiversity, as well as through other actions to create, rehabilitate and improve the accessibility to green spaces by 2025 and 2030, as proposed at the 2020 Île-de-France COP. The Regional Climate Change Adaptation Plan, adopted in September 2022, also underlines the importance given to the region's preservation of biodiversity and green spaces. It makes the protection of ecosystems one of its three main areas of focus, and dedicates a range of resources to this effort.

- **Region's powers/responsibilities:** the region is a leader in promoting biodiversity. It co-developed the Regional Ecological Coherence Plan (Schéma Régional de Cohérence Ecologique - SRCE) with the national government.

- **Types of actions:** territorial-based actions designed to integrate environmental policies into regional development projects; subsidies to contracting authorities and the Green Spaces Agency (Agence des Espaces Verts - AEV) a regional public institution.

- **Target public:** contracting authorities supporting projects, such as municipalities and their groups, French departments, nature associations, professional federations, public institutions and schools.



# REHABILITATION OF BÉCON PARK IN THE MUNICIPALITY OF COURBEVOIE

NEW PROJECT

## Green spaces agency programs



Purpose	Phases 1 and 2 of the project to rehabilitate Bécon Park in Courbevoie
Location	Courbevoie (92)
Key dates	Estimated dates: 1 December 2019 – 1 November 2022
Total project cost	€4.9 million
Region's share (%) in the total amount of the project	6,2 %
2022 financing of the project through the green and sustainable bond	€0.2 million

### ► QUALITATIVE PRESENTATION OF THE PROJECT

- Located in the southeast of Courbevoie, Bécon Park - the city's largest green space - provides a green, natural setting to the residents of the Bécon neighbourhood in Courbevoie and its surrounding municipalities. The registered site is recognised for its picturesque environment, which also houses several buildings valuable to the area's heritage.
- The city has therefore embarked on a project to redevelop Bécon Park, which will be carried out incrementally, with the 1st phase of the works started in 2019 after a feasibility and programming mission was performed between 2016 to 2018. This large-scale operation has 5 phases and will last until 2025 and include the following objectives:
- Open the park to a wider public, including the relocation of the horticultural centre and tennis courts, which will create better connections between the park and the surrounding neighbourhoods and city, while increasing the site's capacity to accommodate more visitors thereby helping to alleviate the current overcrowding
- Protect, enhance and redevelop the park's landscape, heritage and environmental assets, with particular attention paid to the plant heritage and its tree grouping in the upper section, which is negatively impacted by frequent use
- Better distribute the park's various uses throughout the site and reduce pressure on natural areas: open up the lower section of the park to the public and offer easier accessibility with the Seine
- The first phase of the project was carried out by Courbevoie with the financial support of the region, focused on phases 1 and 2 of the project (from 2019 to 2022) over an area of approximately 1.5 ha. This

allowed for the removal of sports areas, including their depaving and revegetation while providing access to the public, which thus created 4,850 m<sup>2</sup> of new green spaces (with 2,000 m<sup>2</sup> of newly depaved terrain) and improved the access to nearly 1 ha of pre-existing green spaces, revegetation and landscaping for public access.

### ► PROJECT LIFECYCLE

- The first part of Bécon Park has been open to the general public since the end of April 2022. One of the main objectives of the renovation project for Bécon Park was to expand the spaces open to the public. This first section of the park includes a new closed-circuit fountain, 8 metres in diameter, which constitutes an attractive and enjoyable water feature where residents can sail model boats. New sports and game infrastructure has also been installed: table tennis tables, multi-sport pitches, children's play structures, strength training equipment, etc. In addition, it offers lawns and recreation areas in the shade of pergola trees and furniture designed for general access.
- The Green Theatre has also been renovated after being closed for a long time to the public for safety reasons. It will now be able to host artistic performances and shows all year round, while providing a space for greater biodiversity. The project included refurbishing the stage by keeping the bird houses in the walls to offer shelter to birds and preserving the existing trees and new plantings, including climbing plants on the back wall of the stage.
- The following phases will be part of another submitted application (ongoing dialogue with the municipality to define the appropriate regional resources).

### ► IMPACT INDICATORS

Indicator	Impact	Methodological note
Number of project beneficiaries	85 000	D-6



## ► REGIONAL ELIGIBILITY CRITERIA

<b>CATEGORY ELIGIBILITY CRITERIA</b> > Restoration and rehabilitation of ecosystems (e.g. renaturation of riverbanks, reopening of urban rivers, planting of hedges) > Forestation, reforestation or rehabilitation, restoration or conservation of forests or sustainable forestry management (PEFC label), restoration of wetlands.	<ul style="list-style-type: none"> <li>• Restoration and rehabilitation of ecosystems (e.g. renaturation of riverbanks, reopening of urban rivers, planting of hedges)</li> <li>• Green space restoration and rehabilitation</li> <li>• 4,850 m<sup>2</sup> of green spaces were created by the project (including 2,000 m<sup>2</sup> of depaved terrain) and 1 ha of pre-existing green spaces had their accessibility improved by the project in a municipality with green spaces</li> </ul>
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## ► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

<b>Environmental management and eco-design of projects</b>	<ul style="list-style-type: none"> <li>• Biodiversity-friendly project (pallet of mostly local plants, no invasive exotic species).</li> </ul>
<b>Combating of climate change and promotion of the region's ecological</b>	<ul style="list-style-type: none"> <li>• Depaving and renaturation, multi-strata plantings, runoff management.</li> </ul>
<b>Contribution to sustainable regional planning and improvement to the quality of life</b>	<ul style="list-style-type: none"> <li>• Improvement of the quality of a green space and its accessibility, improvement of the living conditions.</li> </ul>
<b>Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals</b>	<ul style="list-style-type: none"> <li>• Improved conditions for accommodating the public, green space promoting social connection.</li> </ul>
<b>Respect for fundamental rights</b>	<ul style="list-style-type: none"> <li>• The park is open to the general public and accessible to persons with reduced mobility.</li> </ul>
<b>Responsible regional development</b>	<ul style="list-style-type: none"> <li>• Development of public access (residents, walkers, cyclists, departmental park users) in the Courbevoie park.</li> </ul>
<b>Regional economic development</b>	<ul style="list-style-type: none"> <li>• Development of the region's attractiveness.</li> </ul>
<b>Fair practices, responsible purchasing and responsible supplier relations</b>	<ul style="list-style-type: none"> <li>• Application of the public procurement contract code by the project's contracting authority.</li> </ul>
<b>Promotion of a suitable consultation procedure with internal and external stakeholders</b>	<ul style="list-style-type: none"> <li>• Project has been subject to a consultation with all the stakeholders: government services, relevant municipalities and EPT, region, water agency, associations, residents.</li> </ul>



Proof of eligibility for TSC and DNSH available on the Region's website



<https://www.ville-courbevoie.fr/2094/parc-de-becon.htm>

# CREATION OF A PUBLIC PARK AT PLACE DE LA FONTAINE SAINTE-CATHERINE IN SAINT-GERMAIN-EN-LAYE (78) NEW PROJECT

Green spaces agency programs



Purpose	Creation of a new open green space in Place de la Fontaine Sainte-Catherine
Location	Saint-Germain-en-Laye
Key dates	Project start: 25 March 2021 Completion of work: 27 January 2022
Total project cost	€1.2 million
Region's share (%) in the total amount of the project	15,4 %
2022 financing of the project through the green and sustainable bond	€0.2 million

## ► QUALITATIVE PRESENTATION OF THE PROJECT

- The town of Saint-Germain-en-Laye wishes to create a greenway for pedestrians between the public car park located on Boulevard de la Paix and the Maurice Denis Departmental Museum.
- This greenway will thread through three parks - Place Georges Pompidou at the car park, the future park Place Sainte Catherine (subject of this grant application) and Parc du Musée - which will create more ecological connections between the environments while also highlighting them.
- In this context, a public park will be created on the Place de la Fontaine Sainte Catherine, on a newly built land-take acquired by the town and which is planned to be demolished. Thus, the development work for this new green space includes the demolition of a building, soil decontamination, the depaving of the land and the creation of a new public park: pedestrian paths, playground, furniture, multi-level plantings (network of trees, wooded border, plant beds).
- This project contributes to the municipal green and blue ecological network in connection with the greenway project. It offers a natural

space open to the public, located on previously private land, and retains certain heritage aspects of the old buildings (gritstone walls, historical fountain).

- On the advice of the region and Île-de-France-Nature, the municipality undertook to plant a majority of local Île-de-France species included in the list from the Regional Biodiversity Agency (Agence Régionale de la Biodiversité - ARB). It also undertakes to use "sustainable" furniture (PEFC or FSC certified wood, recycled materials, etc.).
- The central path, paved with black asphalt, can be accessed by persons with disabilities.).

## ► PROJECT LIFECYCLE

- Regional subsidy Green Plan, voted in July 2021 with an early start request on 25 March 2021. The demolition of the building and soil decontamination work began in March 2021 for safety reasons (risk of building collapse).
- Project completed: acceptance of works on 27 January 2022
- Regional grant settled in July 2022.

## ► IMPACT INDICATORS

Indicator	Impact	Methodological note
Number of project beneficiaries	47,000	D-6

Aménagement du square Sainte Catherine





► REGIONAL ELIGIBILITY CRITERIA

**CATEGORY ELIGIBILITY CRITERIA**

> Restoration and rehabilitation of ecosystems (e.g. renaturation of riverbanks, reopening of urban rivers, planting of hedges)  
 > Forestation, reforestation or rehabilitation, restoration or conservation of forests or sustainable forestry management (PEFC label), restoration of wetlands.

- Restoration and rehabilitation of ecosystems (e.g., renaturation of riverbanks, reopening of urban rivers, planting of hedges) => Creation of new green spaces  
 . 1,550 m<sup>2</sup> of new green spaces were created by the project, with the planting of 16 trees and the depaving of 95 m<sup>2</sup> of terrain

► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

<b>Environmental management and eco-design of projects</b>	<ul style="list-style-type: none"> <li>• Biodiversity-friendly project (pallet of mostly local plants, no invasive exotic species).</li> </ul>
<b>Combating of climate change and promotion of the region's ecological</b>	<ul style="list-style-type: none"> <li>• Depaving and renaturation, multi-strata plantings, runoff management.</li> </ul>
<b>Contribution to sustainable regional planning and improvement to the quality of life</b>	<ul style="list-style-type: none"> <li>• Soil decontamination, creation of a new green space, improvement of the living conditions.</li> </ul>
<b>Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals</b>	<ul style="list-style-type: none"> <li>• Creation of a new green space promoting social connection.</li> </ul>
<b>Respect for fundamental rights</b>	<ul style="list-style-type: none"> <li>• Open to the general public and accessible to persons with reduced mobility.</li> </ul>
<b>Responsible regional development</b>	<ul style="list-style-type: none"> <li>• Development of public access (residents, walkers, cyclists, departmental park users) to green spaces and the rehabilitation of unused private land.</li> </ul>
<b>Regional economic development</b>	<ul style="list-style-type: none"> <li>• Development of the region's attractiveness.</li> </ul>
<b>Fair practices, responsible purchasing and responsible supplier relations</b>	<ul style="list-style-type: none"> <li>• Application of the public procurement contract code by the project's contracting authority.</li> </ul>
<b>Promotion of a suitable consultation procedure with internal and external stakeholders</b>	<ul style="list-style-type: none"> <li>• Project has been subject to a consultation with all the stakeholders: government services, relevant municipalities and EPT, region, water agency, associations, residents.</li> </ul>

Plan masse





# EXTENSION OF SECTION 7 OF THE GREENWAY AND CREATION OF SARTROUVILLE FAMILY GARDENS (78)

NEW PROJECT

Green spaces agency programs



Purpose	Extension of the greenway and creation of a family garden in Sartrouville
Location	Sartrouville
Key dates	Estimated dates: 1 June 2019 - 1 July 2020
Total project cost	€1.4 million
Region's share (%) in the total amount of the project	20,4 %
2022 financing of the project through the green and sustainable bond	€0.2 million

## ► QUALITATIVE PRESENTATION OF THE PROJECT

- On areas initially reserved for the deviation of the departmental road R.D. 121, the municipality planned the development of a greenway, classified in zone UL2 of the Local Urban Planning Map. The 7th section of the greenway will be located between Rues Aristide Briand and Reims. This project consists of green spaces, a continuous path for pedestrians and cyclists, playgrounds, family and educational gardens. This path allows everyone to pass through the different neighbourhoods of the town. It leads to the Yuri Gagarine Park, the town's largest green space.
- New open areas allow children to play in a safe space of discovery and integration. These areas are also a place for communication, sharing and family and intergenerational meetings that bring residents closer together. For example, a new educational garden within the greenway's family gardens allows children to open up their minds to the agricultural and rural world. These fun, educational activities complement the knowledge children have already acquired at school by discovering the world of animals and plants in a real-life setting.
- The project includes: the demolition of 11 sheds and the removal of roadway elements, the creation of 2 main paths and 12 walkways to

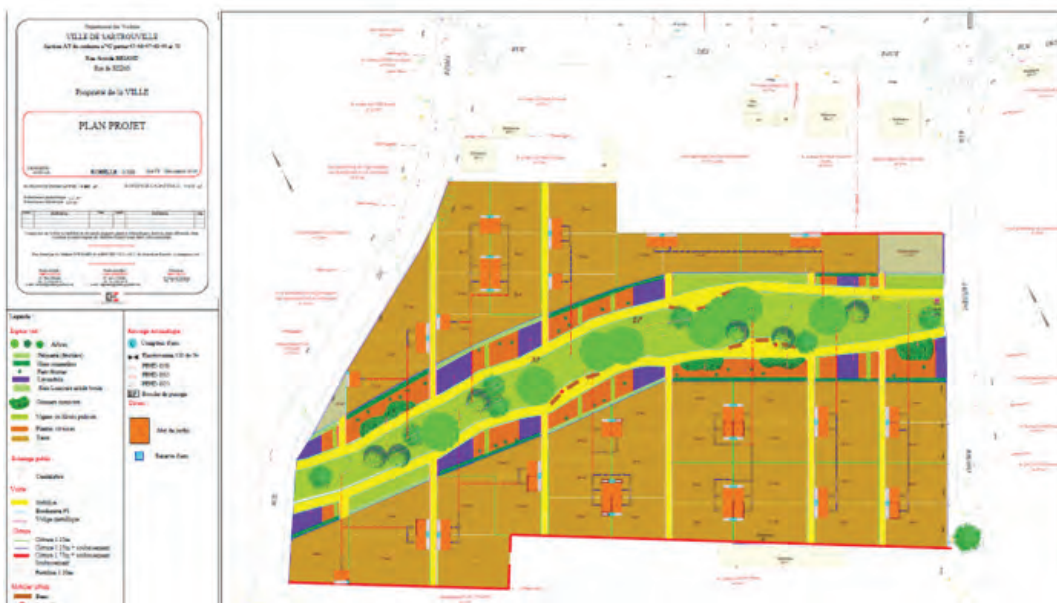
access the family gardens, the installation of storage areas, garden sheds and water collectors, tree plantings, trained plants, shrubs, coniferous trees and perennials, grassing, the installation of drip irrigation and spike-stake fence and screen fencing, as well as furniture for public use and vermifilter toilets.

## ► PROJECT LIFECYCLE

- Regional subsidy Green Plan, voted in July 2019 with an early start request on 1 June 2019.
- Project completed, grant settled in March 2022
- Estimated dates: 1 June 2019 - 1 July 2020
- Early project start: Yes
- Reason for early start: The works will be carried out on certain plots that do not yet belong to the town. Since the French government is the owner, the town is in process of acquiring the land. Pending this acquisition, an agreement was signed between the municipality and the French government allowing for the work to begin.

## ► IMPACT INDICATORS

Indicator	Impact	Methodological note
Number of project beneficiaries	53,302	D-6



► REGIONAL ELIGIBILITY CRITERIA

<b>CATEGORY ELIGIBILITY CRITERIA</b> > Restoration and rehabilitation of ecosystems (e.g. renaturation of riverbanks, reopening of urban rivers, planting of hedges) > Forestation, reforestation or rehabilitation, restoration or conservation of forests or sustainable forestry management (PEFC label), restoration of wetlands.	<ul style="list-style-type: none"> <li>• Restoration and rehabilitation of ecosystems (e.g., renaturation of riverbanks, reopening of urban rivers, planting of hedges) =&gt; Creation of new green spaces</li> <li>• 8,000 m<sup>2</sup> of green spaces created by the project (including 2,160 m<sup>2</sup> of depaved terrain).</li> </ul>
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► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

<b>Environmental management and eco-design of projects</b>	<ul style="list-style-type: none"> <li>• Biodiversity-friendly project (pallet of mostly local plants, no invasive exotic species)</li> </ul>
<b>Combating of climate change and promotion of the region's ecological</b>	<ul style="list-style-type: none"> <li>• Depaving and renaturation, multi-strata plantings, runoff management</li> </ul>
<b>Contribution to sustainable regional planning and improvement to the quality of life</b>	<ul style="list-style-type: none"> <li>• Soil decontamination, creation of a new green space, improvement of the living conditions.</li> </ul>
<b>Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals</b>	<ul style="list-style-type: none"> <li>• Creation of a new green space promoting social connection</li> </ul>
<b>Respect for fundamental rights</b>	<ul style="list-style-type: none"> <li>• Open to the general public and accessible to persons with reduced mobility</li> </ul>
<b>Responsible regional development</b>	<ul style="list-style-type: none"> <li>• Development of public access (residents, walkers, cyclists, departmental park users) to green spaces</li> </ul>
<b>Regional economic development</b>	<ul style="list-style-type: none"> <li>• Development of the region's attractiveness</li> </ul>
<b>Fair practices, responsible purchasing and responsible supplier relations</b>	<ul style="list-style-type: none"> <li>• Application of the public procurement contract code by the project's contracting authority.</li> </ul>
<b>Promotion of a suitable consultation procedure with internal and external stakeholders</b>	<ul style="list-style-type: none"> <li>• Prroject has been subject to a consultation with all the stakeholders: government services, relevant municipalities and EPT, region, water agency, associations, residents.</li> </ul>



<https://www.reseauvelo78.org/2754/sartrouville-la-7eme-tranche-de-la-coulee-verte-est-ouverte/>







## ACCESS TO ESSENTIAL SERVICES: EDUCATION

Projects to improve access to quality educational infrastructure (public secondary education, public higher education), through an increase in the capacity of existing infrastructures to offer educational elements or the improvement of their quality.

In 2017, upon observing the state of disrepair of certain secondary schools and the sometimes inadequate distribution of educational offerings across France, the region committed to improving access to education for the 528,000 secondary school students in Île-de-France. Thus, the emergency plan for French secondary schools includes plans to develop sports equipment, install infrastructure that benefit students with disabilities and improve the buildings of all French secondary schools. In this context, efforts have been made to implement, among others, maintenance plans and an emergency plan for the renovation of sanitary facilities affecting 125 secondary schools. A half-board plan, a sports equipment plan and a documentation and information centre plan have been organised to complete this undertaking. Through all these actions, the region is committed to working for the success of everyone.

- **Region's powers/responsibilities:** Mandatory for secondary schools, higher-education projects forming part of state-region relations
- **Types of actions:**
  - Secondary schools: Contracting authority with representative
  - Higher education: Subsidy or direct contracting authority
- **Target public:** Secondary school students, university students, teachers, researchers

# LANGEVIN-WALLON SECONDARY SCHOOL IN CHAMPIGNY-SUR-MARNE (94)

NEW PROJECT

## Secondary school renovation projects



Purpose	Comprehensive restructuring of Louise Michel secondary school with a targeted operation for Langevin-Wallon secondary school
Location	Champigny-sur-Marne (94)
Key dates	Studies in 2017-2021 Construction began in 2021 Handover scheduled for All Saints' Day 2023
Total project cost	€61.3 million
Region's share (%) in the total amount of the project	100,0 %
2022 financing of the project through the green and sustainable bond	€28 million

### ► QUALITATIVE PRESENTATION OF THE PROJECT

- This operation concerns the 2 contiguous secondary schools Louise Michel and Langevin Wallon, located in the south-west of Champigny-sur-Marne and suffering from functional problems. Its objective is to modernise the infrastructures in order to improve the quality of education of the secondary school students concerned.
- The project provides for:
  - For Louise Michel Secondary School: demolition/reconstruction of the teaching building, the administration offices and housing, as well as the creation of sports areas on the ground floor of the existing half-board building D.
  - For Langevin Wallon Secondary School: the construction of a building at the entrance to the site that will house a reception hall, school administration office, the lodge and multi-purpose hall, as well as the partial restructuring of administrative buildings and the creation of a FabLab within the vocational education building.

- Compliance with the highest standards related to energy efficiency, reduced environmental footprint, water management, landscaping and interior air quality
- The visual and acoustic comfort of users was particularly improved through modelling of lighting and noise levels based on the materials used.

### ► PROJECT LIFECYCLE

- The project started in 2021 on the 2 secondary schools.
- Acceptance of work on Langevin Wallon scheduled for the 2023 start of the school year
- Acceptance of work scheduled for Louise Michel on All Saints' Day 2023.

### ► IMPACT INDICATORS

Indicator	Impact	Methodological note
FTE supported by the project	350 FTEs	A - 3
Number of project beneficiaries	2,300 students	D - 1
CO2 emissions avoided by the project	27.3 teqCO <sub>2</sub> /year	E - 4





► REGIONAL ELIGIBILITY CRITERIA

<p><b>CATEGORY ELIGIBILITY CRITERIA</b>  <b>ACCESS TO ESSENTIAL SERVICES:</b>  <b>EDUCATION</b>          &gt; Provide access to quality educational infrastructures (public secondary education, public higher education)          &gt; Improve the quality of existing infrastructure and equipment for public secondary education and higher education</p>	<ul style="list-style-type: none"> <li>• The aim of this project is to resolve the failings encountered in the 2 secondary schools by creating more coherent modern buildings.</li> <li>• It therefore contributes to improving the quality of existing infrastructures and equipment intended for secondary education</li> </ul>
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► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

<p><b>Environmental management and eco-design of projects</b></p>	<ul style="list-style-type: none"> <li>• All the environmental aspects of the project were taken into account: bioclimatic design, biodiversity, water management, disturbances, health, etc. (see above).</li> </ul>
<p><b>Combating of climate change and promotion of the region's ecological transition</b></p>	<ul style="list-style-type: none"> <li>• The project is part of an effort to reduce its carbon footprint, with a significant reduction in the energy consumption of new and renovated buildings.</li> </ul>
<p><b>Contribution to sustainable regional planning and improvement to the quality of life</b></p>	<ul style="list-style-type: none"> <li>• Rainwater management on the plot: site depaving, retention and collection basins for watering green spaces</li> <li>• The project corrects the functional failings of the 2 secondary schools by constructing new buildings or renovating existing buildings for greater coherence. Green spaces are developed in a specific landscape plan.</li> </ul>
<p><b>Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals</b></p>	<ul style="list-style-type: none"> <li>• The facility is accessible to persons with disabilities. It complies with fire safety regulations.</li> </ul>
<p><b>Respect for fundamental rights</b></p>	<ul style="list-style-type: none"> <li>• Combating social, educational and territorial inequalities</li> </ul>
<p><b>Responsible regional development</b></p>	<ul style="list-style-type: none"> <li>• The new organisation of the 2 secondary schools implemented in this project has been designed to benefit student learning and living conditions (acoustic and thermal comfort, capacity of adapted spaces, etc.). It is therefore part of the development of a quality educational offer in the region.</li> </ul>
<p><b>Regional economic development</b></p>	<ul style="list-style-type: none"> <li>• The construction site and the project's operations generate jobs (including a substantial part of local jobs).</li> </ul>
<p><b>Fair practices, responsible purchasing and responsible supplier relations</b></p>	<ul style="list-style-type: none"> <li>• Compliance with the criteria/rules of the region and the public procurement code.</li> <li>• Strict standards on the choice of construction products and equipment (bio-based materials, resource saving, etc.).</li> </ul>
<p><b>Promotion of a suitable consultation procedure with internal and external stakeholders</b></p>	<ul style="list-style-type: none"> <li>• This project is part of the Provisional Secondary School Programme, which is drawn up in consultation between the rectorate and the region.</li> <li>• Before voting on the project, the secondary school board of directors (under the authority of the headmaster) and the mayor of the municipality are informed by official letter of the regional intention to launch studies in anticipation for carrying out renovations or construction. This opens up a period of dialogue with the school community in order to fine-tune the needs and define the programme's main directions.</li> </ul>









# AFFORDABLE HOUSING

Projects to develop the social housing stock for families, young people and students, meeting environmental and social requirements and contributing to a reduction in the region's social divides.

In addition to supporting the new offer of social housing for families, young people and students, the regional policy implemented since 2016 also aims to revive the creation of intermediate housing for the middle classes. This involves overcoming the difficulties encountered by the middle classes in finding somewhere to live in the Île-de-France region and working towards greater social diversity. The region, by extending the Regional Plan for Higher Education, Research and Innovation (SRESRI) over the period 2023 to 2028, is also committed to developing a “general regional policy to improve the living conditions of students”.

- **Region's powers/responsibilities:** optional.
- **Types of actions:** Subsidies to social contracting authorities, mixed ownership construction companies, associations and bodies approved under the integration contracting authority, regional authorities and their groups and local public companies.
- **Target public:** Students, households where the income is eligible to apply for intermediary or social housing.

# CREATION OF A RESIDENCE FOR YOUNG WORKERS

NEW PROJECT

## Affordable housing



Purpose	Creation of a residence for young workers
Location	Sèvres (92)
Key dates	Residence opening: 23 May 2023
Total project cost	€9.1 million
Region's share (%) in the total amount of the project	11,3 %
2022 financing of the project through the green and sustainable bond	€1.0 million

### ► QUALITATIVE PRESENTATION OF THE PROJECT

- Access to self-sufficient housing is a key step in young people's lives. To meet this challenge, residences for young workers (FJT) offer young people aged 16 to 25 who are currently working or on the path to social and professional integration (apprentices, employees, trainees, job seekers, etc.) affordable, furnished housing and support adapted to their situation. In this way, the residences contribute to the empowerment of young people and encourage social diversity.
- The residence covered by this sheet is located in the "Crystallerie-Manufacture" neighbourhood of Sèvres, close to transport, a business area and the city centre.
- This residence for young workers will be managed by the public service association ESPEREM, which supports and accompanies different groups of people with various problems: families, lone adults, female victims of violence, young people, children facing multiple difficulties, including economic, material, psychological, educational and/or vocational, social and professional integration hardships.
- Three objectives guide the educational and instructional action of the residence team:
  - Socialisation of young people and learning to live in a community through a social intermingling with the aim of fostering social diversity

- Empowerment and accountability through a contractual commitment between the young person and the residence team
- Social support for both the group and the individual to facilitate social and professional integration
- The project is financed by the French government, the Public Institution for Inter-Municipality Cooperation (Établissement public de coopération intercommunale - EPCI), the Family Allowance Fund (Caisse d'Allocations Familiales - CAF) and the Deposits and Consignments Fund (Caisse des dépôts et consignations - CDC). Its partners are the Grand Paris Seine Ouest Territorial Public Establishment (Établissement public territorial Grand Paris Seine Ouest - EPT GPSO), the town of Sèvres, the social housing provider Seqens Solidarités and the management association ESPEREM.

### ► PROJECT LIFECYCLE

- Initial sales agreement: 8 February 2017
- Building permit issued on 15 February 2019
- Handover on 20 December 2022
- Inauguration on 23 May 2023

### ► IMPACT INDICATORS

Indicator	Impact	Methodological note
FTE supported by the project	190.5 FTEs	B and A-5
Number of project beneficiaries	121	D - 1





## ► REGIONAL ELIGIBILITY CRITERIA

<b>CATEGORY ELIGIBILITY CRITERIA</b>	<ul style="list-style-type: none"> <li>• Increased social housing capacity through the construction of new housing or the conversion of existing buildings</li> <li>• Operation allowing the creation of 115 new housing units that offer 121 new places for young workers with fees (rent + charges) while developing a socio-educational project</li> <li>• Programme well integrated into the established urban fabric, reusing an already urbanised plot close to public transport Operation with NF Habitat HQE certification and an energy label higher than the legal minimum at the time, as well as a green roof</li> </ul>
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## ► JUSTIFICATION OF THE ELIGIBILITY OF THE PROJECT FOR EACH CRITERIA

<b>Environmental management and eco-design of projects</b>	<ul style="list-style-type: none"> <li>• RT 2012 -10% NF Habitat HQE and NF Habitat HQE Renovation Performance certifications</li> <li>• These NF-branded certifications guarantee the overall quality and performance of the housing. Issued by an independent body (Cerqual), they commit to complying with very strict specifications.</li> <li>• The NF Habitat HQE certification focuses on three main areas to measure the overall quality of a home, namely: energy performance optimisation, respect for the environment and quality of life.</li> </ul>
<b>Combating of climate change and promotion of the region's ecological transition</b>	<ul style="list-style-type: none"> <li>• -10% Label: As its name suggests, this label strives to reduce the environmental footprint of housing units by 10% compared with the standards set by the 2012 Thermal Regulations.</li> <li>• The building's primary energy consumption, or "PEC max", must be at least 10% lower than that defined by the government for the RT 2012 standard.</li> </ul>
<b>Contribution to sustainable regional planning and improvement to the quality of life</b>	<ul style="list-style-type: none"> <li>• Green roofs to help with rainwater retention, district cooling by evapotranspiration, reflection reduction and thermal or solar radiation and trapping dust. These roofs also provide insulation and encourage biodiversity.</li> <li>• The residence has a communal area that can be used for organising various workshops aimed at helping young people learn to access their rights (finding housing, managing their budget, finding a job, etc.) as well as fostering friendly moments of bonding and encouraging residents to get involved in the development of different projects and in the life of their neighbourhoods.</li> <li>• The creation of project groups with the residents, either on their own initiative or with the facilitation team</li> <li>• This programme enables residents to have high-quality, affordable living conditions that meet the needs of local communities, particularly the desire to empower young workers, as these residences represent a step in the residential journey towards sustainable housing.</li> </ul>
<b>Contribution to socially-inclusive development, combating of inequality and promotion of the safety of individuals</b>	<ul style="list-style-type: none"> <li>• The residence welcomes diverse groups of people into an operation well established in the city's urban fabric, thus promoting social diversity. 6 spots are particularly intended for single-parent families with children from 0 to 3 years old.</li> <li>• Creation of a public-funded youth residence managed by a recognised non-profit association, with regulated rents and charges</li> <li>• Aim to reduce commuting times</li> <li>• Manager offering specific support for residents with the goal of helping them in their personal development, well-being and empowerment.</li> <li>• Programme located about a ten-minute walk from the town hall, Sèvres Rive Gauche train station and the Meudon Forest.</li> </ul>
<b>Respect for fundamental rights</b>	<ul style="list-style-type: none"> <li>• A project that contributes to the socialisation of young people and learning how to live in communities, promoting independence and empowerment for the purpose of accessing sustainable housing</li> <li>• In accordance with the provisions of the French Social Action and Family Code, users' rights are guaranteed, in particular:             <ol style="list-style-type: none"> <li>1. Respect for their dignity, integrity, their private life and privacy, safety and the right to come and go freely</li> <li>2. Quality individual care and support that promotes their development, independence and inclusion, adapted to their age and needs, respecting their informed consent, which must be systematically confirmed</li> <li>3. The confidentiality of information concerning them</li> <li>4. Access to any information or documents relating to their support, information on their fundamental rights and the special legal and contractual protections to which they may be entitled</li> <li>5. Direct participation in the organisation and implementation of the hosting and support project that concerns them.</li> </ol> </li> <li>• 10 housing units directly accessible to young persons with disabilities.</li> </ul>
<b>Responsible regional development</b>	<ul style="list-style-type: none"> <li>• The operation anticipates the "net zero artificialisation" initiative, the aim of which is to combat urban sprawl and preserve natural environments. In fact, one of the buildings located on the site is being renovated to accommodate 45 housing units and the other building is being built in the location of an old chapel.</li> </ul>
<b>Regional economic development</b>	<ul style="list-style-type: none"> <li>• The project is involved in supporting and creating jobs. According to a study by the Banque des Territoires, the new construction of social housing creates and maintains 2.4 jobs in the building sector (1.2 direct and 1.2 indirect); the rehabilitation of social housing creates or maintains 0.5 jobs (0.4 direct and 0.1 indirect jobs).</li> <li>• This operation also meets the objective set by the town's local housing plan to favour housing for the region's workers.</li> </ul>
<b>Fair practices, responsible purchasing and responsible supplier relations</b>	<ul style="list-style-type: none"> <li>• Implementing professional integration clauses in the operation.</li> <li>• Transparent processing with clearly explained eligibility criteria in a framework deliberation accessible by all.</li> </ul>
<b>Promotion of a suitable consultation procedure with internal and external stakeholders</b>	<ul style="list-style-type: none"> <li>• This operation, carried out in consultation with the municipality where the residence is located, contributes to the guidelines of the town's local housing programme and the actions resulting therefrom, and in particular to "developing the offer and resources for providing housing to young workers and students".</li> <li>• Young people living in this residence for young workers play a role in their own empowerment through, in particular, the creation of a tenant association and project groups with residents.</li> <li>• Submission of the package and the allocation proposal to the thematic committee, vote by the standing committee.</li> </ul>



# APPENDICES



## 1- AMOUNTS DISPLAYED IN THE REPORTING (€ MILLION)

### A) Total project cost

For operations of construction, renovation, infrastructure, the amount is calculated by the contracting authority(ies) of the project or its delegate(s), after a projected cost estimate to perform the entirety of the operation.

For the scheme presented, the amount represents the totality of 2022 expenditures which took place for each of the schemes (cf. b below for the methodology).

### B) 2022 financing by the green and sustainability bond

The amount shows corresponds with 2022 expenditures related to the corresponding project/scheme. One exception, an amount less than total 2022 expenditures was selected for the project "Subway line 11", category "Clean transportation".

The amount of expenditures attributable to each project/scheme was controlled by the Control of Management and Systems service (CGSI), within the Pole of Finances of the Ile-de-France Region and by the public accountant.

To do this, the CGSI recovered credits from payouts related to each project/scheme, in the fiscal year corresponding with the reporting year. The identification of the credit payments in question are done through data retrieval tables in the computer of the Institute of International and Strategic Relations (Institut de Relations Internationales et Stratégiques - IRIS). The development of these tables requires selecting a search specific to the project/scheme at the level of: a chapter; a function; a program or budget code; an operation; a scheme; a file; a project.

Once the tables are filled, they are cross-checked with the CORIOLIS financial management tool, and then checked with all the departments related to the reporting, to ensure consistency with the amounts financed by each project.

## 2- METHODOLOGY FOR READING EACH PROJECT UNDER THE LENS OF THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

### The process followed has been formalized as follows:

✓On the one hand, the projects were assessed against twelve objectives out of seventeen. Indeed, **goals N°2, 3, 5, 14 16 and 17** ("Zero Hunger", "Gender Equality", "Good health and well-being", "Peace, Justice and Strong Institutions" and "Partnerships for the Goals") focus more on the social responsibility of the Region as an institution, than on the nature of the investment projects financed under the green and sustainable bond issue program. Given the geographical situation of Île-de-France, **goal N°14** "Life below water - conserving and sustainably exploiting oceans, seas and marine resources" does not concern any project in the Paris region (the preservation and restoration of fresh water and wetland ecosystems fall within the scope of **goal N°15**).

✓On the other hand, some sustainable development goals apply uniformly to all projects eligible for green and sustainable bond, given the project eligibility criteria grid that has been established by the Region (green columns). Thus, each eligible project contributes to the reduction of inequalities and therefore to the struggle against poverty (**goals N°1 and 10**), sustainable development of cities and territories (**goal N°11**), responsible production (**goal N°12**), and the fight against climate change (**goal N°13**).

✓The contribution of each project to the remaining goals is evaluated on a case by case basis, according to the specificity of each project as described in the sheets accompanying this reporting.

✓The list of targets for each Sustainable Development Goal is available on the International Labour Organization website : [https://www.ilo.org/global/topics/dw4sd/theme-by-sdg-targets/WCMS\\_558153/lang--en/index.htm](https://www.ilo.org/global/topics/dw4sd/theme-by-sdg-targets/WCMS_558153/lang--en/index.htm).

## 3- METHODOLOGIES RELATIVE TO THE IMPACT INDICATORS FOR THE PROJECT PRESENTED

### A) Worksite FTEs supported by the project

**A-1:** Value of Call for Tenders Excluding Taxes x 43% (BTO1 TCE Index) / number of hours worked throughout the construction period.

With 1 hour worked = €30 excl. tax and 1,650 hours worked per year.

**A-2:** Method of the National Federation of Public Works: € 1 million invested in the public works sector generates 7.1 direct jobs. This ratio is applied to the total amount of the project and thus concerns the entire duration of the project.

**A-3:** Usage of the employment impact ratio of the Ministry of Sustainable Development (11.6 FTE for € 1 million for works for new construction; 14.2 FTE for € 1 million for renovation works) applied to the cost of the project as a share of the construction works.

**A-4:** Calculation on the basis of the contract amount exclusive of tax, multiplied by the payroll index, divided by the unit price of the payroll (with 230 days worked on a year of work).

**A-5:** Usage of the study conducted by the Territories Bank in November 2021: creation or retention of 2.4 FTEs in the construction sector for the new construction of one social housing (1.2 direct FTE and 1.2 indirect FTE); creation or retention of 0.5 FTE for the restoration of a social housing (0.4 direct FTE and 0.1 indirect FTE).

### B) Integration FTEs supported by the project

This is the objective for the hours of integration in the specifications of contracts with businesses.

**Number of hours of integration =**

**[Size of market Excluding Taxes X share of workers from the State (from 25% to 60%) X Integration rate (from 5% to 7% depending on the facilitator)] / average hourly cost**

The number of hours of integration is then converted into Full Time Equivalents (FTEs) based on the number of days worked in the last year (230 days) and the duration of the works.

When the Region is involved in the project as the contracting authority, the monitoring of following these integration clauses is led by the unit of legal affairs and public markets of the Region. The Ile-de-France Region is supported by facilitators to calculate the hours of integration up to 31/12/2014. Since 1 January 2015, the Region has included in its performing the calculation of hours of integration upstream of the operation in order to have consistency of the calculation across Ile-de-France. The theoretical calculation done by the Region is adjusted with the local facilitator in order to account for the offer of integration across the region. The facilitator effectively follows the integration clauses.

When the Region is involved in the project by providing a subsidy, the contracting authority is responsible for calculating the integration clauses and following their proper application in accordance with the specifications made with the contracting authorities.

### **C) FTEs exploitation consécutifs au projet**

**C-1:** Estimation of the annual hourly amount of work for maintenance, regulatory checks and cleaning.

**C-2:** Estimation of the annual quantity of hours of work for the functioning of the new parts of the project. This estimation is based on the cost of the total wages needed for the functioning of the new parts of the projects, with a total average gross salary of € 45 k (average weighted cost of personnel).

**C-3:** Number of people working in the facility at 31/12/2017.

### **D) Number of beneficiaries of the project**

**D-1:** Number of students who will entirely benefit from the project (capacities).

**D-2:** Number of places per accommodation: for the student residence = 1 per unit; for the social residence = 2 for the 11 T1 bis studios and 1 for the 50 T1 studios.

**D-3:** Number of annual visits to the site counted - Source: Study of number of visits (MICA Research).

**D-4:** Estimation of the number of visits using the traffic modelling (GLOBAL model for RATP and ANTONIN 2 for Ile-de-France Mobilités).

**D-5:** Estimation of usage by model of traffic forecasting model (Transport Union of Ile-de-France (Ile-de-France Mobilités): ANTONIN 2 (Analysis of Transport and Organization of New Infrastructure - Analyse des Transports et de l'Organisation des Nouvelles Infrastructures), based on transportation behaviour observed by the General Transportation Survey carried out in 2001-2002 with 10,500 Ile-de-France households.

**D-6:** Population of the cities concerned.

**D-7:** Number of housing units or equivalent-units supported by the project, multiplied by the average household size in Ile-de-France (2.33 per housing unit, source INSEE).

**D-8:** Capacity of the facility (number of places).

**D-9:** number of winning businesses for the scheme in 2017.

**D-10:** number of businesses and public research establishments having benefitted from a credit allocation in 2017.

**D-11:** capacity in cumulated totals.

**D-12:** Number of users of the P line (Paris-Provins via Longueville section) and TER Grand-Est.

**D-13:** Measure of actual attendance, adjusted for growth forecasts on employment and population.

**D-14:** Product of the number of dwellings supported on the project, by the number of tenants according to the typology of housing (assignment standards practiced by the lessors, minimum averages observed: 1.5 people for a 2-room unit; 2.5 people for a 3-room unit; 3.5 people for a 4-room unit and 4.5 people for a 5-room unit).

### **E) CO2 avoided (teq/year) by the project**

**E-1:** Implementation of the methodology of the THCE rules on French thermal regulations. The method consists in simulating, in the design stage, the energy consumption of the construction accounting for its performance characteristics, and comparing to a reference scenario. To do this, the final maximum energy is specified for each regulatory item (heating, cooling, hot water, lighting, auxiliaries), prorated for the primary real energy consumption of each project. They are then converted into final energy, following the regulatory conversion ratios, as a function of the type of energy used (Decree of 8 February 2012 modifying the Decree of 15 September 2006).

As high school projects, the calculation is contractually performed in two stages: on the one hand a forecast of the design study performed by the contracting authority, on the other a final figure produced at the end of the construction by the businesses.

**E-2:** This is the savings in tonnes of CO2 averted on an annual basis due to the use of renewable energies for this construction. For the calculation, the kWh produced by renewable energies used in the construction are 71,057 kWh which includes production of 103,704 kWh of solar thermal for photovoltaics. (Source: Study of overall cost - PRO File - ANMA/CPR/October 2013).

**E-3:** Subtraction between the emissions of CO2 forecast in the sector in the reference scenario and emissions of CO2 forecast in the scenario with implementation of a project for public transportation.

**E-4:** Theoretical emissions (reference and project) related to the consumption of the regulatory positions of the 2012 thermal regulations (heating, cooling, DHW, lighting, venting auxiliaries, hydraulic auxiliaries).

The values for the project come from the PRO phase RT2012 calculation. The reference value is taken according to the maximums authorized by the thermal regulation (Cepmax). CO2 emissions by type of energy are taken according to ADEME data.

**E-5:** Comparison between the project that was done (geothermal + hot water pump + gas) and a 100% natural gas solution. Using coefficients of emissions of different sources of energy, the quantity of CO2 averted is the difference between the 2 solutions.

**E-6:** Estimation based on the carbon balance methodologies of ADEME and SNCF-Réseau.

**E-7:** Information communicated by the project manager.

**E-8:** According to the ADEME methodology, which estimates 4.8 teqCO<sub>2</sub>/ha/year as "the CO2 equivalent of the net atmospheric carbon absorbed by the forest (corresponding to the balance between photosynthesis and tree respiration), from which are subtracted the emissions associated with tree mortality and wood removal (the carbon corresponding to the volumes of dead or removed wood being considered as immediately being emitted back into the atmosphere as CO<sub>2</sub>)." - <https://www.territoires-climat.ademe.fr/ressource/435-152>.

## F) Taux de rentabilité interne du projet

Le TRI permet de déterminer l'intérêt du projet pour la collectivité, en retranchant de ses coûts (coût d'investissement en infrastructure and matériel roulant, coût d'exploitation) ses avantages (gains de temps pour les usagers des transports collectifs ; avantages liés au transfert modal de la voiture particulière vers les transports collectifs ; économies d'usage de la voiture, d'entretien de la voirie and de construction de places de stationnement ; économies d'externalités : pollution, bruit, effet de serre, accidents).

Ces coûts and avantages sont quantifiés and transformés en un équivalent monétaire, afin de calculer le taux de rentabilité interne du projet selon la méthode suivante :

$$B = -I - \sum_{t=1}^T \frac{\Delta I_{t0+t}}{(1+r)^t} + \sum_{t=1}^T \frac{a_{t0+t}}{(1+r)^t} + \frac{R}{(1+r)^T} \quad \text{avec}$$

$\Delta I_{t0+t}$  → les variations d'investissement (de gros entretien) par rapport à la situation de référence

$a_{t0+t}$  → l'avantage économique à l'année calculé en agrégeant les variations d'utilité de différents acteurs par rapport à la situation de référence

- r** le taux d'actualisation
- I** le coût du projet envisagé
- R** la valeur résiduelle de l'investissement en fin de période



## Environmental management and eco-design

<b>Vigeo 2016 definition</b>	<i>"The project is implemented in accordance with an eco-design (or eco-construction) approach, and/or an approach aimed at managing its environmental impact (pollution, nuisance, resources, and biodiversity, etc.)"</i>
<b>Additional definition</b>	<p>The eco-design consists of accounting for the environment from the design of a product or service through all stages of its life cycle. In the context of operations financed by the Region, the eco-design can be understood as accounting for the environment in the scheme falling within the scope of the project, as well as in the operations of the construction when it is an eco-construction.</p> <p>The environmental management designates the policy and/or methods of management put in places in order to account for the environmental impact resulting from implementation of the project, to evaluate this impact and also to reduce this impact and to also reduce it in relation to the project construction as well as during its operations.</p>
<b>Possible illustrations</b>	<ul style="list-style-type: none"> <li>- Process for environmental certifications (BEPOS, HQE, ISO, etc.)</li> <li>- Accounting for environmental impacts in the management of the construction site (e.g.: charters, low nuisance sites, green sites, etc.)</li> <li>- Integration of environmental concerns in the specifications</li> <li>- Recourse to support for the contracting authority devoted to environmental management of the project</li> <li>- Explanation of accounting for environmental aspects within the scheme relating to the project</li> </ul>

## Combating climate change, and promoting the Region's environmental transition

<b>Vigeo 2016 definition</b>	<i>"The project contributes to reducing greenhouse gas emissions, in compliance with the Region's Climate Plan, and/or to the regional environmental transition process, as part of the Regional Economic Development and Innovation Strategy".</i>
<b>Additional definition</b>	The project promotes the ecologically-friendly transition of the region by enabling, for example, a reduction in CO2 emissions, savings in natural resources (energy, water, waste, etc.), by promoting the adaptations in consideration of future climate change, by participating in the protection of biodiversity.
<b>Possible illustrations</b>	<ul style="list-style-type: none"> <li>- Expected objective to reduce CO2 enabled by the project (with respect to an initial situation observed in the case of renovation or with respect to a reference scenario in the case of a newly constructed building)</li> <li>- Use of renewable energies</li> <li>- Recovery of rainwater and/or grey water</li> <li>- Project design respectful of neighbouring biodiversity</li> </ul>

## Sustainable regional planning and improving quality of life

<b>Vigeo 2016 definition</b>	<i>"The project is in keeping with the regional sustainable planning strategy, and contributes to improving the quality of life for its users and/or staff".</i>
<b>Additional definition</b>	<p>Sustainable planning: the project was conceived with an interest to be qualitatively involved in the region, for example by looking out for good integration of landscaping, balanced density of housing, respect for urban fronts.. It can also promote the continuity of quiet modes of transportation and incorporate corrective measures linked to nuisances even of the project.</p> <p>Improving quality of life: the project makes it possible to propose a service/product that was not accessible or easily available, or to facilitate the usage of this service/product by residents/users. The project can also be involved in directly improving the well-being of residents/users.</p>
<b>Possible illustrations</b>	<ul style="list-style-type: none"> <li>- Integration of the project in the region (planting greenery, presence of green spaces, integration of the building into the urban fabric, etc.)</li> <li>- Improvement of quality of life targeted by the project: gains in transportation time, reduction of local nuisances (pollution, noise...), well-being (quality of landscaping, dignified housing...)</li> <li>- Accessibility of a population to a new service</li> <li>- Opening a service to a new population (which did not previously have access)</li> </ul>

## Socially inclusive development, combating inequality, and promoting the safety of individuals

<b>Vigeo 2016 definition</b>	<i>"The project contributes to combating social exclusion, to reducing inequality, or to preventing risks relating to health, working conditions, and/or individuals' safety (users, neighbouring residents, and staff)".</i>
<b>Additional definition</b>	<p>The project may promote:</p> <ul style="list-style-type: none"> <li>· Accessibility of places to all of the public (deaf, blind, handicapped, etc.),</li> <li>· Integration of disadvantaged persons (distant from employment, schooling, access to new information and communications technologies, etc.),</li> <li>· Personal security on the site (video surveillance, security personnel, fire safety measures, etc.),</li> <li>· Participation in development of leisure tourism for all.</li> </ul>
<b>Possible illustrations</b>	<ul style="list-style-type: none"> <li>- Equipment planned to promote accessibility and/or security</li> <li>- Integration of the project in the renovation/opening up of a district</li> <li>- Health benefits of the project for the persons concerned</li> <li>- Taking into account of social criteria (different rates, fight against exclusion, etc...)</li> <li>- Definition of a pedagogical program working towards better social integration</li> </ul>

## Respect for fundamental rights

<b>Vigeo 2016 definition</b>	<i>"The project is implemented in a way that respects fundamental rights".</i>
<b>Additional definition</b>	<p>Projects in the Region are carried out in compliance with fundamental rights and existing legislation. Each project can participate in improving practices with regard to one or many fundamental rights in respect of the objectives of generalized interests set by the law or the following texts:</p> <ul style="list-style-type: none"> <li>· Universal Declaration of Human Rights (1948),</li> <li>· Covenant on Civil and Political Rights (1969),</li> <li>· Covenant on Economic, Social and Cultural Rights (1969),</li> <li>· The fundamental rights at work as identified by the International Labour Organization.</li> </ul>
<b>Possible illustrations</b>	<ul style="list-style-type: none"> <li>- Security and health of persons, workers on construction sites</li> <li>- Right to come and go</li> <li>- Right to education</li> <li>- Equal rights and opportunities</li> </ul>

## Responsible regional development

<b>Vigeo 2016 definition</b>	<i>"The project increases the Region's attractiveness in keeping with sustainable and balanced economic development".</i>
<b>Additional definition</b>	The project participates in the development of dynamization of the region from a long-term perspective, responding to a need, or anticipating the creation of new needs, or accompanying the urban development of a sector.
<b>Possible illustrations</b>	<ul style="list-style-type: none"> <li>- Needs in terms of transportation, employment, the supply of tourism, green spaces, etc.</li> <li>- Integration into a development zone</li> <li>- Innovative projects participating in the dynamization of the territory</li> <li>- Projects directly supporting economic activity in disadvantaged areas</li> </ul>

## Regional economic development

<b>Vigeo 2016 definition</b>	<i>"The project contributes to creating or maintaining jobs and/or sustainable business activities in the Region".</i>
<b>Additional definition</b>	The project may sustain employment, on a construction site and in operational phase, or accompanying SME projects with growth prospects, or by supporting innovative processes and research, a source of dynamism and potential long-term job prospects, or also by maintaining an economic activity in certain areas.
<b>Possible illustrations</b>	Creation / support to FTEs

## Fair practices, responsible purchasing and responsible supplier relations

<b>Vigeo 2016 definition</b>	<i>"The project is implemented in compliance with fair practice principles (combating corruption, fair competition, respect for labour laws, and equal treatment, etc.). Environmental and social factors are included in the purchase of products and services relating to the project. The purchasing practices relating to the project enable the interests of suppliers and sub-contractors to be respected (payment terms, managing dependency, and equality of access to orders, etc.)".</i>
<b>Additional definition</b>	The different service providers acting on the project have been selected in the framework of a transparent procedure, in respect of the principle of equal treatment and of competition. Environmental and/or social requirements are provided for in the specifications and regulations of the subsidy.
<b>Possible illustrations</b>	<ul style="list-style-type: none"> <li>- Application of the Public Procurement Code, transparency of the investigation process in the context of subsidies</li> <li>- Elements of the "Responsible public procurement" of the Region applicable to the project</li> <li>- Choice of materials which are respectful of the environment, hours of social integration</li> </ul>

## Consultation with stakeholders

<b>Vigeo 2016 definition</b>	<i>"The project is subject to an appropriate consultation process, both internally and/or with the external stakeholders concerned (information meetings, steering committee, meetings with voluntary organisations, and representation of elected officials, etc.), whose expressed requirements are taken into account".</i>
<b>Additional definition</b>	The project was implemented in a context of consultation aiming to account for the needs of stakeholders without distorting the object of the project.
<b>Possible illustrations</b>	<ul style="list-style-type: none"> <li>- Dialogue and consultation with the stakeholders</li> <li>- Description of public surveys</li> <li>- Description of the consultation of the process of evaluating subsidies and/or financial sheets on the project</li> </ul>



**ADEME**

French Environment and Energy Management Agency (Agence de l'environnement et de la maîtrise de l'énergie).

**ILE-DE-FRANCE GREEN SPACES AGENCY (AEV)**

In the design and implementation of development projects for Ile-de-France's natural areas, the AEV links these regional policies and tools with a more local and partnership-based approach via the Regional Land Intervention Areas (PRIF).

**ANRU**

National Agency for Urban Renewal.

**BEPOS building (called "positive energy")**

Building that has very low energy consumption. Its primary energy consumption must be less than the amount of renewable energy it produces via its equipment.

**Certification BEPOS Effnergie 2013**

A pilot certification that can be awarded in the short term; it builds on the 2012 thermal regulations and the Effnergie+ certification. Above all, the building must respect the criteria of the Effnergie+ certification and must also be the subject of an evaluation of the grey energy and the potential of eco-mobility.

Certifications FSC and PEFC: These certifications are defining forest sustainable management rules, in compliance with international standards. They are based on the FSC (Forest Stewardship Council) or PEFC (Pan European Forest Certification) references.

**CSRPN**

The Regional Scientific Council for Natural Heritage (CSRPN) is a body of specialists under the authority of the regional prefect and the president of the regional council which may be consulted on questions on the knowledge, conservation and management of the regional natural heritage.

**Certification NF High Environmental Quality (HQE) Tertiary Buildings**

enables to discern between buildings where the environmental and energy performance corresponds with best existing practices. It concerns the phases of the programming, the conception and delivery for new and renovated housing units.

**Certification Patrimoine Habitat**

values a rehabilitation program committed to by a contracting authority by setting the level of performance to achieve. It accounts for the quality of the budget and the community parties, the comfort and performance of housing, fire safety and health of occupants.

Competitiveness clusters: Created in 2005 in the framework of the launch of a new industrial policy in France, the competitiveness clusters are defined as the combination in the same territory of businesses, higher education establishments, and public or private research organizations which have the vocation to work in synergy to implement economic development projects for innovation. Competitiveness clusters promote the development of relationships between businesses/research laboratories, or SMEs/Large groups in Ile-de-France but also internationally with partner clusters and with the knowledge of their ecosystem to assist a business, a laboratory to identify the skills/know-how needed to complete their project. They accompany the businesses, and primarily SMEs to improve their project by calling upon a network of experts among their members.

**DUP**

Statement of public interest (Déclaration d'Utilité Publique).

Eco-mobility potential (for a building or dwelling): corresponds to the energy consumption generated by the journeys of the users of that building or dwelling. When assessing the energy performance of a building or a dwelling, these consumptions are also taken into account.

**GREY ENERGY**

corresponds to the total consumed energy expenditure throughout the life cycle of a material, its extraction and recycling, and including its transformation.

**"LABEL EFFNERGIE +"**

Label targeting 20% decrease in maximum energy usage linked to five regulation-related building uses (heating, hot water, lighting...) compared to the level in the 2012 french thermal regulation (RT 2012); this label aims to go further than the BBC label in terms of the construction of new buildings. It plan to go from 50 to 40 kWhep/m<sup>2</sup>/year for housing with an intermediate level of 45 kWhep/m<sup>2</sup>/year until 2014. "Effnergie" + also requires a Bbio (bioclimatic needs) 20% lower than the Bbio set by the 2012 RT The requirement in terms of air permeability are also higher than the BBC label.

**LABEL BEPOS EFFNERGIE 2013**

Label pilote, applicable à court terme, il s'appuie sur la RT 2012 et le label Effnergie+. Le bâtiment doit avant tout respecter les critères du label Effnergie+ et doit également faire l'objet d'une évaluation de l'énergie grise et du potentiel d'écomobilité.

"Label BBC Effnergie" for renovation: this label concerns renovated residential buildings, with an objective of a maximum primary fixed energy consumption of 80 kWh/m<sup>2</sup>.year, adjusted for the climatic zone and altitude. In Ile-de-France, a coefficient of 1.3 must be applied to this objective.

Modal shift: allows users to benefit from an alternative to a car by choosing a mode of collective transportation which is more environmentally friendly.

**PLU**

Local town planning plan

**TCSP**

Public transport on own site.

**ZAC**

Concerted development zone.

*This document falls within the context of the issuance of the green and sustainability bond carried out by the Ile-de-France Region in 2022 and is in particular intended for investors.*

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